THE MEDICAL NEWS.

A WEEKLY JOURNAL OF MEDICAL SCIENCE.

VOL. LVI. SATURDAY, MARCH 8, 1890. NO 10.

ORIGINAL ARTICLES.

SOME CASES TREATED WITH IODOL.

BY DAVID CERNA, M.D.,

ASSISTANT IN THE LABORATORY OF EXPERIMENTAL THERAPEUTICS IN THE UNIVERSITY OF PENNSYLVANIA.

ALTHOUGH comparatively a new remedy, iodol has already been used somewhat extensively by various practitioners in the treatment of those diseases especially for which iodoform has been employed.

This therapeutic agent was brought into notice, in 1885, by Vulpius, of Heidelberg, and by Dr. G. Mazzoni,[1] of Rome, both of whom employed it as an antiseptic in the treatment of wounds. Following these writers, many surgeons and general practitioners have used iodol for the same and other purposes with the most happy results.

Without going into an examination of the literature of the subject, regarding the physiological and therapeutical action of the drug, I may state in general that iodol has been employed advantageously, by various observers, in the treatment of eye affections, and in such diseases as adenitis, blennorrhagia, vaginal catarrh, tubercular laryngitis, and in others of syphilitic origin. It has been found of great service in the treatment of buboes, chancres, and ulcers in general, and has also been used as an internal remedy in most stages of syphilis and scrofulous affections.

In private practice, I have given a fair trial to this new drug, and obtained, in many instances, most excellent results. Among the cases the following are the most important:

CASE I.—R. H., male, of lymphatic temperament, aged fifty-five years, grocer by occupation, had a phagedenic ulcer in lower third of left leg. He had been suffering for about a year, and during that time was treated by several quacks but without avail; he constantly grew worse. When I first saw the patient he was in a bad condition, and suffered greatly both mentally and physically. The ulcer was five centimetres in length, three in width, and one in depth; of irregular form, and, as I have said, phagedenic in character, covered with vegetations which secreted a muco-purulent discharge: edges ragged, indurated, and pigmented; no local, or very slight, venous congestion. Close examination of the patient revealed no syphilitic history. A ten days' local treatment with a solution of corrosive sublimate (1 : 1000), iodoform, a cotton pad and bandaging, did the patient no good. Discontinuing this treatment, I immediately began the use of iodol. The ulcer was cleansed with the bichloride solution, then dusted over with the powdered iodol, using, as previously, the absorbent cotton pad and light bandaging from the foot to a little below the knee. Next day I was surprised to notice a great improvement. The bad odor had disappeared, the edges of the ulcer were much softer, the discharge was lessened in amount, and several cicatricial points had begun to appear. The patient remarked to me that soon after the application of the drug he felt a pleasant itching or tingling sensation which lasted several hours. The same treatment was continued, and a steady improvement observed, until the twenty-eighth day, when the patient was discharged cured.

CASE II.—Mrs. A. C., aged fifty years, housewife, of sanguine temperament. Had been troubled for several months (could not tell the exact time) with ulcerations of both legs; otherwise she appeared to enjoy comparatively good health. It appears that several years ago she suffered from a scrofulous affection as revealed by certain cicatrices on both sides of her neck. Her history, and especially her family's, showed that there was some syphilitic taint in her constitution. On the middle third of the right leg there was an ulcer which was almost round, its mean diameter being three centimetres, its depth one centimetre; edges ragged, hard, somewhat reddened, and on the surface were ugly vegetations discharging an abundant, white, viscid liquid, which had a very disagreeable odor; lesion very tender and bled to the simple touch. There was another ulcer on the left leg, situated on the lower third, and was three centimetres in length, two in width, and about one in depth; in every other respect this presented almost the same characters as the other; but here was noticed a varicose condition of the veins, and the pain and bleeding of the ulcer produced by simple touch were very pronounced. The patient was placed upon ten-grain doses of iodide of potassium daily, and a simple nourishing diet. The ulcers, after being washed with a solution of bichloride of mercury (same strength as last, which is the solution I have generally used in such cases), were touched with nitrate of silver, covered with a cotton pad, over which was placed the usual bandage. This treatment was continued for a week with no apparent good results, either on the general health of the patient nor on the local trouble. The internal administration of medicine was stopped. Iodol was resorted to, and with a view of making a comparative study, iodoform was also employed. The ulcer on the right leg was treated with the former, that on the left leg with the latter drug. The usual dressing was applied to both ulcers. On the next day I found that the lesion of the right

[1] Berliner klinische Wochenschrift, 1885.

limb, the one on which iodol was used, presented the most encouraging results; the bad odor had disappeared, its surface was perfectly clean and free from the crust which iodoform is so apt to form; the indurated borders were much softened, and there was a marked diminution in the viscid muco-purulent discharge. In the ulcer treated with iodoform no improvement was noticed, and it had almost the same appearance as on the previous day. This patient spoke to me also of the agreeable tingling sensation felt in the right ulcer, soon after the application of iodol, and which lasted for several hours. This course of treatment was pursued without interruption, and at the end of three weeks the disease of the right side had entirely disappeared, leaving a good cicatrix. The one treated with iodoform had scarcely improved at all, so that this drug was discontinued and iodol used, and eventually the happiest results were observed. In two weeks longer the patient was completely cured and advised to wear rubber stockings.

CASE III.—E. N. G., aged thirty years, of nervous temperament, tailor by trade, applied to me for treatment with two ulcers in the lower third of the left leg, fibular surface, and one on the right leg, also fibular surface, situated on upper third. History revealed a syphilitic taint, the disease having been contracted about eight years before. When he applied to me he was suffering from terrible dyspeptic symptoms, which had greatly weakened his constitution. A few months previously, while under medical treatment, he expelled several yards of tapeworm. His health, however, was but little improved. The ulcers of left leg were about the same size, and measured three and a half centimetres in length, two in width, and one in depth; hard, reddened contours; ragged irregular edges; granulations ugly and oozing pus of a very disagreeable odor. The one on the right leg, five centimetres in length, three in width, and about one in depth, bore almost the same characters as the other two. These were subjected to iodol treatment, while on the other one iodoform was employed. Patient was placed on iodide of potassium, ten grains daily, but the salt was discontinued at the end of six days, owing to aggravated symptoms of dyspepsia, intense frontal headache, and marked coryza—all unmistakable signs of iodism. The ulcers treated with iodol soon showed marks of improvement, and in three weeks were entirely cicatrized; the one under iodoform presented no changes in the same period of time, and was subsequently subjected to iodol with good results.

CASE IV.—F. G. S., male, aged forty-five years, of lymphatic temperament, carpenter by trade, was suffering from a tubercular syphilide, involving left ear and end of nose; had contracted the disease about ten years before, and while laboring from secondary symptoms, his wife had two abortions, and a child had died within a year of its birth, undoubtedly from syphilitic disease. The patient was placed upon iodide of potassium, eight grains daily, but in a short time gastric disturbance, frontal headache, and other untoward symptoms of iodism were developed, and the drug was suspended. After several days the medicine was tried again, but only to produce the same disagreeable effects. It was finally discontinued and iodol resorted to. This drug was employed in doses of three grains three times a day, and the writer was pleased to see rapid improvement of the patient, who within six weeks was entirely relieved and cured, for the time being at least, of his local trouble. No constitutional effects were produced by this medicine with the exception of slight diarrhœa, which completely disappeared soon after the discontinuance of the drug. No local treatment was employed.

CASE V.—The next case was that of N. G., aged thirty-eight years, a laboring man, of sanguine temperament, who came under my observation with a well-defined phagedenic ulcer of the fauces, involving, to a certain extent, the soft palate and uvula. Cross-examination of the patient revealed a syphilitic history of twelve years' standing. He now suffered from difficulty of swallowing, regurgitation through the nostrils, and snuffling. As regards his general condition, he was a perfect wreck. I immediately placed him upon a strict dietetic regimen, and began the local application of iodol by means of a spray of an ethereal solution. Being a case of a distinct tertiary form of syphilis, and one of the most aggravated types at that, iodide of potassium and protiodide of mercury, twenty grains of the first and half a grain of the second drug were prescribed alternately every other day. The appearances of the local lesion improved rapidly, but, at the end of two weeks, the worst forms of iodism and ptyalism ensued, and, of course, the drugs were suspended. I now resumed the administration of the potassium salt alone, in the dose of twelve grains daily, and a few days afterward the untoward efforts of this therapeutic agent presented themselves, which caused me to abandon it and substitute iodol, also internally, beginning with small doses and gradually increasing the amount to as high as twenty grains a day. At the end of three months from the commencement of the treatment the ulcer was entirely healed, swallowing and the voice returned to normal, and the patient, who, in his own words, "never felt better in his life," was discharged.

The use of iodoform in diabetes mellitus by Moleschott,[1] referred to by Professor James Tyson, of the University of Pennsylvania, in his excellent article on this disease,[2] suggested to me the idea of employing iodol in that affection, as a trial, and I have to report one case in which good results were obtained.

CASE VI.—A. E., aged thirty-eight, of nervous temperament, farmer, came under my professional care with the following symptoms: Frequent micturition, especially at night, loss of appetite, great thirst, a disagreeable dryness of the mouth and fauces, and general emaciation. The quantity of urine was certainly greater than normal; he passed, the second day after I first saw him, a little more

[1] Wiener medicinische Wochenschrift, Nos. 17, 18, 19, 1882.

[2] A System of Practical Medicine by American Authors, edited by Professor William Pepper, vol. ii. p. 228.

than three quarts. Microscopical and chemical examination of the urine showed a few epithelial cells, and a very large amount of sugar with Fehling's test. The urine was acid in reaction, with a specific gravity of 1022. Lack of time and of proper apparatus on the occasion prevented me from making an accurate quantitative analysis. The patient was placed on an exclusive milk diet and six grains of iodol daily. Examinations of the urine were made every second day, and it was found that *pari passu* with the decrease in the amount of the fluid there was a marked reduction of the sugar. In one month the sugar was greatly diminished, and the general health of the patient improved in every respect. At the end of two months the diabetic condition of the urine had entirely disappeared, and the patient was discharged as cured.[1]

These are some of the most important cases that have come under my observation, and in which, as may have been noticed, I have had the most excellent results from the use of iodol. These results are certainly very encouraging, and further trials should be given the drug as a local and systemic remedy. Rich as it is in iodine, there is no doubt that its properties are due to this element, as is the case with iodoform; but over iodoform it has advantages, one of the chief being its lack of the disagreeable odor so characteristic of the latter drug. This advantage will be, and is, most noticeable in the treatment of local affections, such as chancres, vaginal catarrh, adenitis, buboes, blennorrhagia, ulcers, and other diseases, particularly in private practice.

Sufficient evidence, I think, has already been brought forward as to the great value of iodol as an internal remedy chiefly in cases that require alterative treatment.

I suggest the internal employment of this new and powerful drug, especially in those syphilitic cases, even of the worst type, which, owing to idiosyncrasies or what not, will not bear long the constitutional effects of mercury and iodide of potassium.

In conclusion, I may state that with regard to the local application of iodol, I have employed it either in powder, solution, or as an ointment. Solutions can be made in alcohol (one part to three), or ether (one to four). I have generally used it as an ointment, one part to four or five of vaseline. Internally, I have given, as it may have been observed, as much as twenty grains a day; but, on high authority,[2] larger doses (thirty to forty-five grains daily) may be employed without producing untoward constitutional effects.

[1] I saw this patient a little over a year afterward. He had gained several pounds in flesh, and appeared to enjoy the best of health. He was then the father of two healthy children (twins).

[2] Pick: Therapeutische Monatshefte, No. 1, 1887.

NOTE ON THE USE OF TURPENTINE IN TYPHOID FEVER.

BY H. C. WOOD, M.D., LL.D.,
PROFESSOR OF THERAPEUTICS IN THE UNIVERSITY OF PENNSYLVANIA.

THE most useful articles in a medical journal are not those which are the most original, and certainly if lack of originality be a spice of value, the present note in regard to the oil of turpentine in typhoid fever will be well flavored. The employment of the remedy I believe originated with Dr. George B. Wood, and was certainly very strongly inculcated by him, so that it has been amusing and instructive when from time to time, especially in some of the English journals, it has been brought forward as a new discovery by medical writers. Dr. George B. Wood taught that the oil of turpentine acts as a local remedy in typhoid fever, and that there are two stages of the disease in which it is especially useful. The first is at the end of the second week, when the tongue becomes especially dry and glazed, and the abdomen very distinctly tympanitic, with or without the coexistence of diarrhœa. The second period in which the remedy was especially used by the former Professor of Therapeutics in the University was during convalescence, when the perpetually recurring diarrhœa, with lack of digestive power, indicated failure of some of the intestinal ulcers to heal. For nearly twenty-five years I have been following the practice of my predecessor, and I am very thoroughly convinced by experience in hospital and in private practice that many lives would be saved if the oil of turpentine was more freely used in this disease. I do not believe that it is possible to reach the ulcerations in the small intestine with nitrate of silver, or other similar readily decomposable or readily absorbable remedy. The volatile oils are absorbed slowly, and are rapidly vaporized at the temperature of the human abdomen, so that there can be no reasonable doubt that, either in the form of liquid, or more probably in the form of vapor, when given freely by the mouth, that they get into contact with the mucous membrane of the upper intestine. It has become my routine habit to give the turpentine in every case of typhoid fever, beginning about the twelfth or fifteenth day, and I believe if its use were habitual in the profession there would be much fewer cases of intestinal hæmorrhage or other severe symptoms due to a local lesion.

In my own case convalescence from typhoid fever was exceedingly slow on account of the perpetually recurring diarrhœa, and when at the instance of Dr. George B. Wood himself, then an old man nearly eighty years of age, the turpentine was exhibited, the local symptoms were relieved immediately. Four or five times I experimented by stopping the turpentine, and when local symptoms had returned, on giving the turpentine again, would see them abate within

twenty-four hours. The effect of the drug was scarcely mistakable. The turpentine may be disguised by means of glycerin and a volatile oil made into an emulsion, which is rarely objected to by patients. Ten or fifteen drops should be given every two hours during the day, the patient being allowed to rest at night. The following formula will be found satisfactory:

℞.—Ol. caryophylla . . . . gtt. vj.
Ol. terebinth. . . . . fʒjss.
Glycerin, } . . . āā fʒss.
Mucil. acaciæ, }
Syrup, } . . . āā q. s. ad fʒiij.—M.
Aquæ, }

Sig.—Dessertspoonful as directed.

A STUDY OF VILLOUS TUMORS OF THE BLADDER.[1]

BY CHARLES N. DIXON JONES, M.D., B.S.,
OF BROOKLYN, NEW YORK.

WHENEVER a case of severe and often-repeated hæmaturia comes under observation, the physician has a specimen of the bloody urine submitted to an examination with the microscope, in order to establish a correct diagnosis in regard to the site and cause of the hæmorrhage. Such a diagnosis cannot, however, always be obtained, even though the examination be undertaken by the most skilful microscopist, and especially is this so if the amount of blood present in the urine be excessive. An experienced microscopist may spend many hours of faithful examination without being able to determine the seat of the hæmorrhage.

Every hæmorrhage in the genito-urinary tract must, of necessity, cause a detachment of a certain number of shreds of connective tissue. Between the walls of the bloodvessels and the outer covering there is a layer of connective tissue which must, as a matter of course, be torn off by the current of blood at the spot where the rupture of the vessel occurs. The amount of connective tissue, however, may be so small that it escapes altogether the attention of the microscopist. This occurs more especially when the rupture takes place in the venous bloodvessels of the mucosa of the bladder, as in these instances the veins are in a state of varicose enlargement, a condition which was termed by the older pathologists "hæmorrhoids of the bladder."

I know, for instance, of a case in which urine heavily loaded with blood was sent to a microscopist for examination. He was unable to locate the site of the hæmorrhage, whereas, the surgeon (the late Dr. Carnochan) positively asserted that he could start the hæmorrhage by introducing a sound into the neck of the bladder. Probably this was an instance of dilated veins at the neck of the bladder, rupturing spontaneously or upon the slightest touch with an instrument.

When, however, the shreds of connective tissue are numerous, being found mixed with the sediment at the bottom of the vessel after the voided urine has stood at rest for a period of six or eight hours, a diagnosis as to the source of the hæmorrhage is, in most instances, possible. Such shreds are voided with bloody urine in either of four instances:

1. In ulceration of the mucosa of the genito-urinary tract—mainly the bladder, but sometimes the urethra or the pelves of the kidneys.

2. In a suppurative process after the rupture of an abscess, and in which shreds of the so-called membrana pyogena are readily detached.

3. In cases of tumors, most frequently of the bladder.

4. A rather common cause is the presence in either the bladder or the pelvis of the kidney of a foreign body in the form of a calculus.

The calculi in the pelves are invariably made up of uric acid or oxalate of lime; in the bladder, on the contrary, they may be composed of alkaline phosphatic salts, deposited primarily or around a nucleus, passed from the pelvis through the ureters.

Traumatism may, as a matter of course, be instrumental in rupturing bloodvessels and causing the appearance of sloughs and shreds of connective tissue in the urine. In order to establish a positive diagnosis as to the source of the hæmorrhage, the epithelium, so markedly different in different portions of the genito-urinary tract, will prove of inestimable value to the microscopist. For no one will doubt that in every instance of a rupture of bloodvessels on the mucous surface a certain number of the epithelial cells covering the particular spot of injury will be detached. Such epithelia will be of diagnostic value in cases of traumatism, ulceration, and abscess. But if the hæmorrhage be due to the presence of a tumor, the epithelia detached will prove of comparatively little service, since we know that the tumors themselves are covered with either cuboidal or columnar epithelium, which varies greatly both in size and shape, and will not enable us to determine the location of the tumor. Quite recently I examined the urine of a woman thirty-eight years of age, which was loaded with blood. The patient was subject to repeated attacks of hæmaturia with intervals extending to days or even weeks, in which the urine was free from blood. Under the microscope I found, in addition to pus and red blood-corpuscles, numerous epithelia of the kidneys, a few epithelia from the pelves of the kidneys, and a few resembling those of the middle layers of the bladder. My conclusion was that the organ exhibiting its epithelia most lavishly must be the site of the hæmorrhage. Therefore, my diagnosis was:

[1] Read before the Brooklyn Medical Microscopical Society, January 8, 1890.

"Hæmorrhage from the kidneys due to pyelo-nephritis," the more positive, as I encountered a certain number of granular casts.

The clinical examination of this case disproved my diagnosis. I found in the mucosa of the urethra a papillomatous growth, freely supplied with blood-vessels, the so-called caruncle, which bled furiously upon being touched with the catheter. The latter, upon being introduced into the bladder, yielded urine free from blood, but with all the characteristic features of pyelo-nephritis. It is obvious that in this case the complication of caruncle of the urethra led to an erroneous diagnosis, once more proving the fact that microscopical examination is a mere aid in diagnosis, and becomes valuable only by being combined with clinical examination.

Tumors of the bladder are of rare occurrence and usually give rise to temporary hæmorrhage, owing to the unstable or fluctuating condition of the walls of the bladder, due to the alternate expansion and contraction of that organ. Such hæmorrhages are, as rule, the first symptoms to draw the attention of the patient and the physician to a morbid condition of the bladder. I have recently had the opportunity of examining three specimens of tumors of the bladder, all of a villous type, and, therefore, will confine myself to the description of these three villous tumors, adding a report of a certain number of instances, in which the diagnosis of a villous tumor of the bladder was made by the examination of the urine only, without corroboration by surgical interference or post-mortem examination. (These researches I have conducted in the laboratory of Dr. Heitzman, in New York.)

To-day it is an acknowledged fact that but two types of villous tumor occur in the walls of the bladder, taking their origin from the mucous tissue of this organ. The benign type of villous tumor is termed *papilloma*, the malignant papillomatous or villous carcinoma. It is, indeed, a strange fact that this distinction, being of such vital importance, both to the pathologist and the patient, has been acknowledged only within the last fifteen years. Previous to this time every villous tumor of the bladder, without exception, was termed villous cancer.

C. Rokitansky speaks only of villous cancer of the bladder, admitting, at the same time, that it is a comparatively harmless affair, causing hæmorrhage, but scarcely ever producing infiltration in neighboring, or secondary tumors in distant, organs.

Kocher, of Berne, Switzerland, seems to be the first, in 1876, who described the form of tumor termed benign papilloma of the bladder. He was followed by Winckel, of Munich, in 1877, and by Alexander W. Stein, of New York, in 1881.

Lücke, of Berne, in 1869, made the following statement:[1]

"Papilloma of the bladder, or what is ordinarily designated cancer of the bladder, deserves special mention. This disease of the mucosa of the bladder consists in a villous proliferation of the submucous tissue which sends out long ramifying villosities, covered with a regular epithelium."

Although in this by no means rare variety of tumor of the bladder, secondary cancerous formations have not been observed, it was placed among the cancers mainly on account of its deleterious course. The diagnosis during life is easy when large villosities are voided with the urine, but a distinction between this form and the true carcinoma of the bladder is scarcely possible, since to both the uncontrollable hæmorrhages, the ulceration of the vesical mucosa, and the secondary diseases of the kidneys are common, as to all tumors of the bladder. Lücke says that polypous tumors of both the bladder and the urethra may exhibit a papillomatous growth, sometimes with considerable enlargement of the bloodvessels. His figure, copied from Demme, is intended to illustrate a papilloma, but in reality it exhibits plainly nests of epithelia in the connective tissue stroma, and, therefore, is a carcinoma.

Ultzmann and Hoffmann[2] give illustrations of what they call villous cancer, both with high and low powers of the microscope. Their drawings, however, correspond to an entirely benign papilloma, without any of the structural features that belong to cancer.

In 1887, Bizzozero[3] gave illustrations of a shred of connective tissue, and of flat epithelia, both single and in clusters, which no conscientious microscopist will dare to attribute to cancer.

Alexander Peyer[4] gives copies of plates both apparently from Bizzozero's and Ultzmann's illustrations, which he likewise considers diagnostic of villous cancer of the bladder.

The only author who has ever done justice to this topic is Alexander W. Stein. In his excellent treatise,[5] he sharply discriminates between benign papilloma and malignant cancer of the bladder. Plate I. of his book is a copy after R. S. Hudson,[6] exhibiting eight pedunculated papillomatous growths arising from the mucosa of the bladder. Some are as large as filbert-nuts.

[1] Die Lehre von den Geschwülsten in anatomischer und klinischer Bezielung. Handbuch der Allgeimenen und Speciellen Chirurgie. Von Pitha and Billroth.

[2] Atlas der Physiologischen unt Pathologischen Harnesdimente. Von Ultzmann and Hoffmann. Wien, 1872. Plates 41 and 42.

[3] Handbuch der Klinischen Mikroskopie, von Dr. Giulio Bizzozero. Second edition, translated by Dr. Stefan Bernheimer. Erlangen, 1887. P. 290.

[4] Atlas der Mikroskopie am Krankenbette, von Alex. Peyer. Stuttgart, 1887. Plate 40.

[5] A Study of the Tumors of the Bladder. New York, 1881.

[6] Polypi of the Bladder. Dublin Medical Journal, June, 1879.

In Plate II. he gives microscopical sections with both low and high powers. The explanation accompanying the figures drawn with high power, is especially remarkable for its clearness.

Hudson says:

"The thin-walled capillary vessels of irregular diameter may be seen coursing through the growth, the whole surface being covered with columnar or polygonal epithelium. The epithelium is, however, on the surface, *homologous*, not within the subjacent connective tissue, *heterologous*, which is characteristic of epitheliomatous growths."

Sir Henry Thompson, in a lecture[1] on "Tumors of the Bladder," states that:

"Until recently, most vesical tumors were supposed to belong to that class of growths roughly indicated as 'cancerous.' And, besides these, a single species was familiarly recognized under the term villous, although by some this was also relegated to the preceding class, as 'villous cancer,' without any warrant, however, for doing so. It was well known to be a bleeding tumor, which sooner or later produced a fatal result by its single irrepressible function of continuous bloodletting. This so-called 'villous growth' is, in fact, of all varieties, that which most commonly affects the bladder, under the name of papilloma."

In his classification he describes the following forms of tumors of the bladder: 1, mucous polypus; 2, papilloma; 3, fibrous papilloma; 4, myoma; 5, epithelioma; 6, scirrhus.

"The rarest of all is the dermoid tumor, which has been, on two or more occasions, met with in the bladder."

He also describes a class of tumors which "appears to be best indicated by using the term 'transitional' to describe it, as, perhaps occupying a place between papilloma and a formation of malignant type, sarcoma."

Mr. Gilbert Barling,[2] in a paper on "The Surgery of Tumors of the Bladder," in speaking of the classification of tumors, says:

"Hitherto there has been the greatest confusion, and nearly everything has been termed villous or cancerous, without any definite meaning being attached to either word. To many surgeons it will, I believe, be a surprise to learn that a very considerable number of these tumors are innocent. Examination of the records of nearly 300 cases show that about half of them were innocent tumors, the exact condition of nearly all being verified by microscopical examination."

"Amongst the innocent tumors papilloma is by far the most common, as it more than outnumbers all the rest put together. Of the malignant tumors two-thirds are carcinomas, and the remainder sarcomas, but it is a singular fact that until the last few years the existence of sarcoma of the bladder was ignored or denied.

"Carcinoma of the bladder is commonly of the squamous variety or epithelioma, but the alveolar growth does occur, and may be termed clinically either encephaloid or scirrhus."

He defines the term "villous" as merely descriptive, and not applied to a definite species.

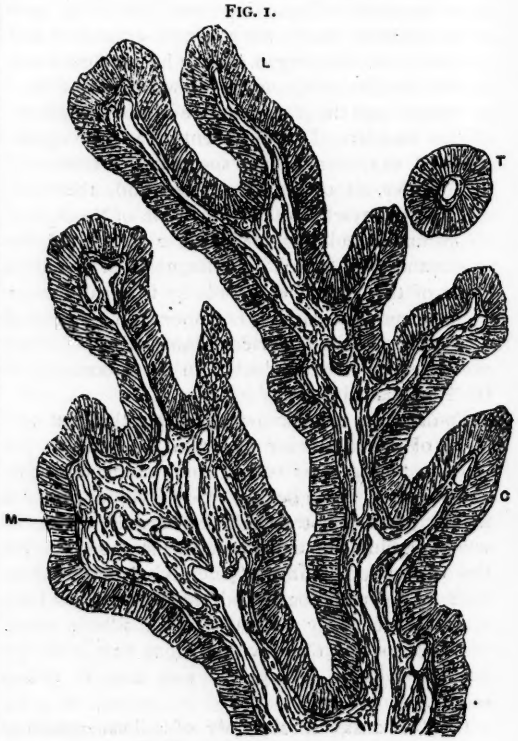
[1] British Medical Journal, January 7, 1888.

[2] Birmingham Medical Review, May, 1888.

In the *British Medical Journal* for July, 1888, Mr. Barling described a case in which he removed a scirrhous carcinoma from the bladder of a man sixty years of age.[1]

The tumor which furnished the specimens for my own research appeared to be about the size of a child's fist. It was removed by supra-pubic cystotomy from the posterior surface of the bladder of a man forty-five years of age, the patient dying, several days after the operation, from septic peritonitis. The tumor was attached to the submucous tissue by means of a broad pedicle, and exhibited all over the surface a marked cauliflower-like appearance. After hardening in chromic acid, a portion was embedded in celloidin and cut in different directions. Low powers of the microscope sufficed to establish a diagnosis of papilloma (Fig. 1).

FIG. 1.



Papilloma of bladder, × 100.

L, longitudinal section of villi.
T, transverse section of villus.
C, columnar epithelium.
M, myxo-fibrous connective tissue, freely supplied with bloodvessels.

There are innumerable branching villosities, made up of a delicate myxo-fibrous tissue, running in

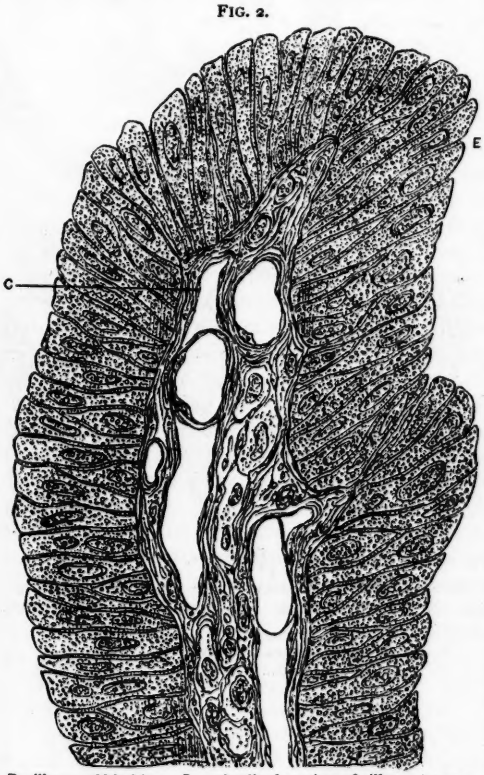
[1] I regret that I have been unable to obtain access to Mr. E. Hurry Fenwick's essay on the "Pathology of Tumors of the Bladder."

different directions, so that in one and the same specimen we observe longitudinal, transverse, and oblique sections of villi. This connective tissue is supplied with a large number of bloodvessels, mainly capillaries, but also many venous vessels were found, especially in the broad pedicle of the tumor. Toward the summits of the villi these vessels formed loops, often visible only in transverse sections.

The connective tissue is covered by a so-called stratified columnar epithelium of rather exceptional breadth. Most of the papillomata that have thus far been described, had a coating of cuboidal or short columnar epithelium arranged in a single layer.

Higher powers of the microscope give an insight into the minutiæ of the tumor (Fig. 2).

FIG. 2.



Papilloma of bladder. Longitudinal section of villus. × 500.
C, myxo-fibrous connective tissue with numerous and wide capillary bloodvessels
E, stratified columnar epithelium.

The connective tissue is neither purely myxomatous nor purely fibrous, but a combination of both, known as "myxo-fibrous." The network of this tissue is made up of delicate bundles of fibrous connective tissue, in the meshes of which we see protoplasmic bodies varying in size and shape, but nowhere very numerous.

The capillary bloodvessels are conspicuous by a pronounced adventitial wall of fibrous connective tissue, such as we often meet with in myxomatous or myxo-fibrous tissue, more especially of tumors. The endothelial coat of the vessels is marked by large nucleated endothelia, a rather common feature in newly formed bloodvessels generally. At the periphery of the connective-tissue formation there is a faintly marked layer, the "structureless or basement membrane." The covering epithelia are columnar of a rather unusual length, and stratified by the interposition of nucleated wedges between the points of approximation of the epithelia. The nuclei are vesicular, and, corresponding with the protoplasm around the nuclei, are finely granular. The cement substance between the epithelia is extremely narrow, and traversed by rather indistinct thorns.

All papillomatous growths of the bladder give rise to repeated, sometimes even dangerous hæmorrhages. The reason for this is obvious, when we consider the alternate contraction and expansions of the walls of the bladder, as well as to the currents and whirlpools created in the urine in its expulsion from the bladder.

We can easily realize that delicate shreds of the villosities may be torn off, either with their covering epithelium *in situ*, or detached. The epithelia alone cannot have a great diagnostic value, since they vary so much both in size and shape. The connective-tissue shreds, on the contrary, if voided with the urine in large quantities, are of positive diagnostic value, owing to their ramifying or cauliflower-like configuration, and their richness in bloodvessels, which are either filled with blood corpuscles or empty.

I wish to draw attention particularly to two cases in which hæmaturia was present, together with numerous branching shreds of connective tissue, rendering the diagnosis of papilloma highly probable. In neither of these cases was a post-mortem examination obtained, and for this reason the diagnosis did not go beyond the probability of the presence of papilloma of the bladder.

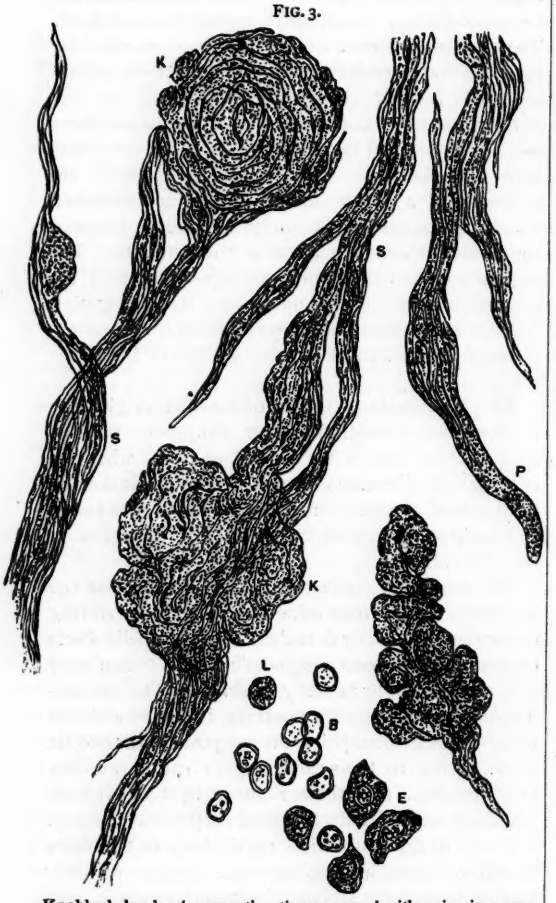
One of these cases was that of a man, of about fifty years of age, who, after many years of ailment from hæmaturia, died from exhaustion. In this case the villi were characterized by coils at their ends, somewhat resembling the tufts in the cortical substance of the kidney. Such tufts are not infrequently seen in papillomata of other organs. Possibly, however, they may be attributed to the coiling of the apices of the villi, caused by the whirl in the escaping urine (Fig. 3).

The detached epithelium in this case was cuboidal, somewhat resembling that of the pelvis of the kid-

ney, and, therefore, of no diagnostic value whatever.

The second case was that of a man, aged thirty years, who by previously repeated hæmorrhages was much exhausted. The shreds voided in this instance were not striated or fibrous, but either single worm-like granular masses, or masses of remarkable shapes, with many ramifications.

FIG. 3.



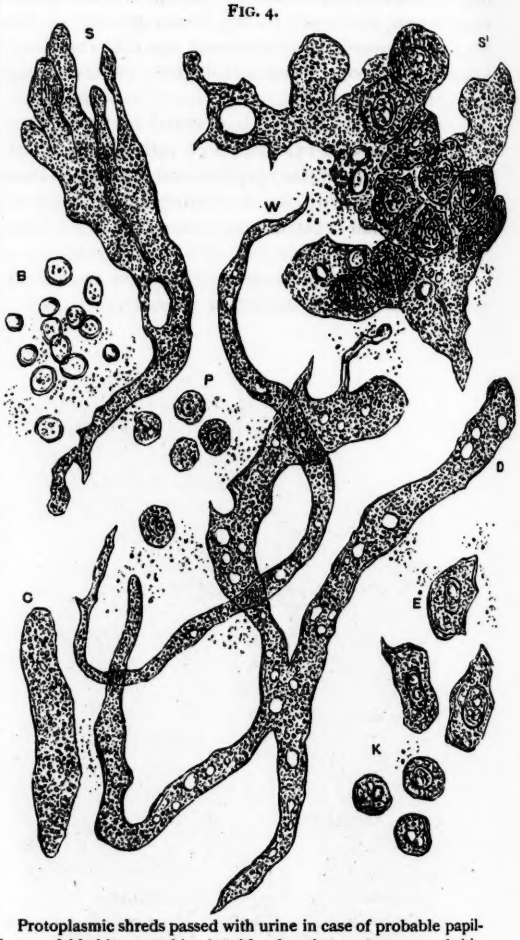
Knobbed shreds of connective tissue, passed with urine in a case of papilloma of bladder. × 500.

K, K, knobs and tufts, caused by a coiling of capillaries.
S, S, striated and fibrous shreds of connective tissue.
P, protoplasmic shred.
B, red blood-corpuscles.
L, leucocyte.
E, covering epithelium of papilloma.

All these peculiar formations exhibited the structure of protoplasm, lacking basis substance. In various portions were seen numerous, small vacuoles, possibly the spaces, in which fat globules had been imbedded. (See Fig. 4.)

In this second case, some of the shreds so closely resembled the filaria sanguinis hominis that, at first sight, the possibility occurred to me that we had to deal with hæmaturia from such a parasite. But the ramification of these shreds, and the distinct fibrous structure of some of them, rendered the presence of a papilloma of the bladder more probable. The urine showed in addition numerous red blood-corpuscles in all stages of development, also a number of pus corpuscles, kidney epithelia, and granular casts, which features proved the presence of croupous or parenchymatous nephritis, as a complicating

FIG. 4.



Protoplasmic shreds passed with urine in case of probable papilloma of bladder, combined with chronic croupous nephritis. × 500.

S, branching protoplasmic shreds.
S', branching protoplasmic shred, studded with cuboidal epithelium.
W, worm like shred.
D, double protoplasmic shred.
B, red blood-corpuscles and hæmatoblasts.
P, pus corpuscle.
K, kidney epithelia.
C, granular cast.
E, covering epithelium of tumor.

disease, probably dependent upon the presence of a tumor of the bladder. Unfortunately nothing could be learned in regard to the fate of the patient.

I know of an instance in which beautiful ramifying connective-tissue shreds were found in the urine, together with a large amount of blood.

The diagnosis was obviously papilloma of the bladder. The hæmaturia ceased shortly after, and the patient died in about eight months of an intercurrent disease. At the post-mortem examination the mucosa of the bladder was found smooth and free from any tumor. This, of course, does not prove that the diagnosis was incorrect, but rather that a small papilloma attached by a slender pedicle, may have been completely torn away with the result of a complete cure.

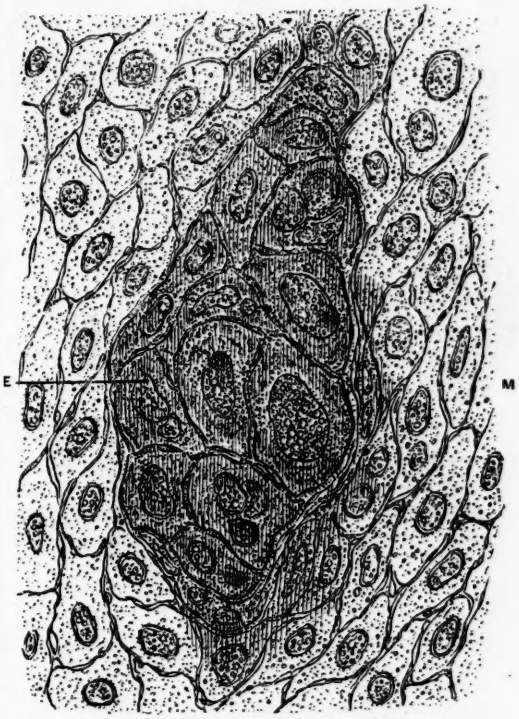
The second typical form of villous tumor of the bladder is the villous cancer. Alexander W. Stein, in his above-quoted study on tumors of the bladder, distinguishes four varieties of carcinomata, viz., epithelioma, encephaloid, villous cancer, and scirrhus, which, as he believes, are enumerated in the order of their frequency.

From my studies, I must take exception to the nomenclature of Dr. Stein. Villous cancer is not a distinct species, but merely a sub-variety of either epithelioma or medullary cancer, which latter form Dr. Stein designates by the rather obsolete name of encephaloid. Whether or not scirrhus ever assumes the shape of a villous tumor I am unable to say, since I have had no such case under personal observation. But I am positive that both epithelioma and medullary cancer may, under certain conditions, assume a villous appearance on their surface. In other words, a villous cancer is either an epithelial or a medullary cancer exhibiting the peculiar cauliflower-like appearance so characteristic of papillary tumors in general. It is quite possible that such villous carcinomata start originally in the form of harmless papillomata, gradually assuming the characteristics of cancer, as has been suggested by Kocher (loc. cit.). Obviously the mode of growth and the loop-like arrangement of the capillaries at the periphery determine the villous character of the tumor, which as such is by no means essential to the pathology and clinical course taken by the growths.

I have seen and studied cancer shreds which were voided with the urine in two cases. One was that of a woman sixty-two years of age, the other was that of a man fifty-six years old. In the first case microscopic examination proved the shreds to have sprung from an epithelioma; in the second case they came from a so-called medullary cancer of the bladder.

The shreds in the first case varied in size from the smallest branching or tree-like masses just discernible with the naked eye up to lumps half an inch long and one-quarter of an inch in diameter. The thinnest shreds being placed under the microscope, exhibited a number of detached epithelia of both the flat and cuboidal varieties. The main mass was made up of a delicate myxomatous or myxo-fibrous tissue, in which there were embedded numerous nests of flat, so-called dermoid epithelial cells disposed in the form of pegs and rows. The concentric arrangement of the epithelium was marked in but a few places. Higher powers of the microscope revealed the characteristic epithelial structure of the pegs, the epithelium being supplied with one or several coarsely granular nuclei, evidently in an active process of so-called indirect division. The epithelial pegs and rows were surrounded by a rather regular myxomatous tissue (see Fig. 5).

FIG. 5.



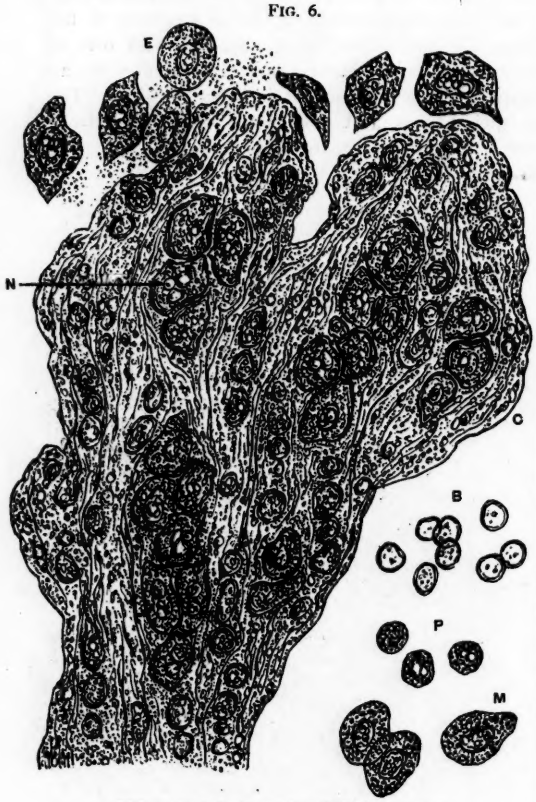
Villous dermoid cancer of bladder, so-called epithelioma, × 500
E, epithelial nest.
M, myxomatous connective tissue.

At the borders of the pegs the transitional forms could frequently be seen, indicative of a transition of connective into epithelial tissue. This transition was established either by a coarse granulation of both the protoplasmic bodies and the basis substance of the myxomatous tissue, leading to a transmutation into epithelium, or so-called myeloplaxes, multinuclear protoplasmic bodies of considerable size were

seen, which, by the appearance of new cement substance, seemed to furnish the material for future epithelial pegs. Dr. A. W. Johnstone,[1] of Kentucky, has described this mode of formation, as the rule, in the transition of lymph tissue into secondary cancer.

My second case was a medullary cancer, showing cauliflower-like or pointed excrescences upon the numerous though small shreds voided with the bloody urine (see Fig. 6).

FIG. 6.



Villous medullary cancer of bladder, × 500.
N, epithelial cancer nest.
C, connective tissue reduced to protoplasm and crowded with so-called inflammatory corpuscles.
B, red blood-corpuscles.
E, covering epithelium of tumor.
M, epithelium from either the middle layers of the bladder or from the surface of the tumor.

In this instance the connective tissue was devoid of myxomatous or fibrous structure, but was for the most part transformed into an uniformly granulated protoplasmic mass, holding a large number of so-called inflammatory corpuscles and numerous irregular epithelia, mostly arranged in small nests. This type of cancer is justly considered the most malignant of all. Unfortunately I am unable to give clinical details as to the subsequent history of either of these patients.

Villous cancer of the bladder has in times gone by always been considered rather mildly malignant, being instrumental in producing hæmorrhages, but not causing an infiltration of the contiguous tissues or secondary formations in distant organs. This view can no longer be maintained, since we know that there are two varieties of villous tumors, the benign papilloma and the malignant carcinoma. Papillomata may undoubtedly remain harmless so far as their pathology is concerned, though they may destroy life rather slowly by repeated hæmorrhages. Cancer, on the other hand, impairs the constitution by the loss of blood, as well as local growth and infiltration of the adjacent tissues. Further researches of tumors, positively diagnosed to be cancerous, will be required, in order to settle the question, whether primary cancers of the bladder do not cause the growth of secondary tumors in distant organs, as has been maintained by the older pathologists.

To-day, since electric cystoscopy has attained such a marvellous degree of perfection, the clinical diagnosis is much facilitated after the microscope has drawn attention to the presence of a villous tumor in the mucosa of the bladder. By this means the site, size, and configuration of the tumor may be readily determined in the living patient. The chances of successfully removing such a tumor by anterior cystotomy are likewise much more favorable than they were some twenty years ago, when antiseptic surgery was unknown to the operating surgeon.

[1] Microscopical Morphology, by C. Heitzman, 1888.

ELECTRICITY IN A CASE OF FÆCAL IMPACTION.

With Notes on Solvents for Fæces.

BY GUY HINSDALE, M.D.,
ASSISTANT PHYSICIAN TO THE PRESBYTERIAN HOSPITAL, AND TO THE ORTHOPÆDIC HOSPITAL AND INFIRMARY FOR NERVOUS DISEASES.

IN a case of constipation with periodic impaction that about eighteen months ago came under Dr. Weir Mitchell's care, such gratifying results were obtained that the following account of it may be of use to the profession:

The subject, a lady, about fifty years of age, for nearly fifteen years had been greatly annoyed by impactions of fæces. No very alarming symptoms had ever been brought on, and it was found that the hardened lumps would come away if the patient remained in bed several days. Many of these lumps showed evidences of having been weeks, and even months, in the intestine.

There seemed to be a particular place where these masses became lodged, side-tracked, as it were, for upon their final passage they could be readily distinguished from the accompanying excretion, the latter being comparatively soft.

A physician who had been previously consulted at one time introduced his hand and a portion of his forearm into the bowel, but did not discover any stricture. Dr. Mitchell considered the difficulty to be due to atony of the muscular coat of the intestine, and advised the use of electricity locally applied, and massage of the abdomen and of the body generally. In addition, the patient was to take a laxative pill and a tablespoonful of glycerin internally three times a day.

I had a special form of electrode made, consisting of a polished steel bougie two inches long and five-eighths of an inch in diameter, with blunt convex extremities. This was screwed to a flexible copper rod which was plated and insulated, and provided with a screw for attachment to a handle. This made an instrument sixteen or seventeen inches long.

About eighty applications of the faradic current were made, in which the instrument was usually introduced sixteen inches. As a rule, no great difficulty attended its passage, although it was not easy to pass the flexure of the rectum, especially if the fæces had collected, and it was generally possible to tell when the bulb passed by these lumps, which were lodged usually eight or nine inches from the anus.

Not the slightest injury was done to the intestine by the passage of the instrument. Sometimes flatus was forced backward along the bowel, causing momentary distress like colic, but otherwise no pain was experienced. A broad electrode, six by five inches, was applied at different places over the abdomen, and a moderately strong faradic current used for about half an hour daily. The internal electrode was withdrawn gradually, so as to influence directly the entire calibre of the bowel within its reach.

Injections of glycerin were tried without giving a satisfactory result; only mucus came away. Laxatives were abandoned later in the treatment of the case, and strychnine internally and hypodermically was resorted to, together with belladonna. Both Dr. Mitchell and the patient, however, were confident that the greatest improvement was made by the electricity, and at the end of treatment she found herself able to go about with freedom, without the least inconvenience from impactions, and is now in a better state of general health than for many years.

At Dr. Mitchell's suggestion, I made some experiments with the scybala passed from the bowel that I think are worth recording. Some of the smaller lumps of fæces about ¾ inch by ½ inch, selected as nearly alike as possible and in a state as when passed from the bowel, were put into several different fluids, to test the readiness with which they might soften, viz.:

I. Pure water. At the end of one week showed softening of the fæcal mass and discoloration of the water, the lump being at the bottom of the glass. In two weeks it was broken down and the water much discolored.

II. Pure glycerin. In one week no discoloration; the lump floated. In four weeks no perceptible change, excepting very faint discoloration of the fluid.

III. Aromatic sulphuric acid ʒj, water ʒvij. In one week considerable softening, great discoloration; lump sank; offensive. In two weeks great discoloration and softening.

IV. Cod-liver oil. In three weeks little, if any, change. In ten months no change beyond slight hardening of the mass and diffusion of the coloring matter.

The following experiments were made with a large egg-shaped mass, which was squared so that its surfaces were perfectly fresh. It was then cut into sections each about ¾ inch by ½ inch by ½ inch.

V. Pure water. On the first day the mass was at the bottom of the glass, and some tendency to discoloration and softening was noted. The softening was greater in one week. In two weeks it was crumbling, and fell to pieces on being disturbed.

VI. Lime water. In one day more softening and discoloration than in V. In one week it was quite soft, and in two weeks it crumbled, and on shaking was thoroughly disintegrated. This solution seemed to have the greatest softening action.

VII. Glycerin. In two weeks the lump seemed hardened. The color was diffused through the glycerin.

VIII. Tartaric acid, gr. v; water, ʒj. In the first day discoloration of the solution was noted. In two weeks the lump was still intact.

IX. Tartaric acid, gr. x; water, ʒj. In one day this showed the most discoloration of any of the fluids. No softening in two weeks; its shape was intact, but it could be disintegrated by pressure.

X. Glauber's salt, gr. xx, to fʒj of water. In one week the color was diffused and softening had commenced. After eighteen days the mass still retained its shape.

XI. Glauber's salt gr. xl to fʒj of water. Result the same as in X.

XII. Rochelle salt gr. xx to fʒj of water. In one week more softening than in X. and XI. In eighteen days well disintegrated.

XIII. Rochelle salt gr. xl to fʒj of water. Still more softening than in XII., and thoroughly disintegrated in eighteen days.

XIV. Soap solution gr. xx to fʒj of water. Not so much disintegration as in XII. and XIII.

XV. Soap solution gr. xx to fʒij of water. About the same result as in XIV.

The conclusion from these trials would seem to indicate that an alkaline solution, like lime water, or solutions of Rochelle salt, would be most likely to soften scybala; that oils and glycerin harden them, and that a weak acid solution chiefly affects the coloring matter.

ABSCESS OF THE CORNEA.

BY H. F. HANSELL, M.D.,
OF PHILADELPHIA.

THE symptomatology and pathology of abscess of the cornea may be found in every text-book on diseases of the eye, are well known and accepted, and a review of them in this paper may with propriety be omitted. Differences of opinion among eminent practitioners exist, however, in relation to the therapeutics, and may well invite further discussion.

The results of some clinical investigations pursued by me during the past year have shown:

First. That eserine is superior to atropine.

Second. That cocaine is a symptomatic remedy only, and, when long continued, is injurious.

Third. That the Saemisch operation is, in most cases, inferior to a simple division of the abscess.

To de Wecker should be ascribed the merit of repeatedly bringing eserine to the notice of the profession, and of urging its use in corneal affections. His followers have been few, and eserine has not attained that place in ocular therapeutics to which it is entitled. I have frequently prescribed it in abscess and deep ulcer, and have never regretted it. On the contrary, I am convinced that eyes have been saved, which under mydriatics would have been lost. The case described below, which is one of many, is a fair illustration, as eserine was used after other remedies had failed.

Two objections are urged against this drug: First, that the danger to vision, on account of the small pupil produced, is increased. This objection is just, and should be considered. Care must be taken that the contraction of the iris and ciliary muscles does as little damage as possible. To guard against permanent closure of the pupil and constant spasm of accommodation, instillations of eserine should be alternated with instillations of atropine, or the former may be used by day and the latter by night. These two remedies are therapeutically compatible, and, when employed in the same case with a full understanding of their effects, they give the best results. If, however, the abscess threatens to destroy the vision, the possible danger from posterior synechiæ and pupillary membrane should be risked. It is then a choice between two evils.

The second objection is that headache follows the use of eserine. This is invariably observed, yet, in my experience, it has not proven a real obstacle. When eserine is recognized as the cause and explained to the patient, the importance of the headache vanishes. The pain is not intense, and subsides in from one to two hours, and when, exceptionally, it interferes materially with the patient's well-being, the strength of the solution may be decreased. Stronger solutions than two grains to the fluid-ounce are not advisable.

The writer protests against the common practice of prescribing cocaine in abscess and other severe corneal affections. As a remedy, cocaine has no place in the therapeutics of the cornea. It is deservedly held in high esteem as an anæsthetic for the surface of the eye, and as an aid to atropine and other mydriatics in dilating the pupil. It is a well-known fact that it destroys the anterior epithelial surface of the cornea, and this occurs when used in weak as well as strong solutions. If applied but a few times, the epithelium is afterward restored, and the eye suffers no damage. If, however, the applications are frequently repeated, superficial ulcers and opacities result. The momentary relief from photophobia or pain cannot be advanced as a sufficient reason for its use in face of the undeniable fact that this very relief is obtained at the expense of the membrane already diseased. It needs no argument to prove how pernicious this action must be in those diseases which are caused by loss of epithelium and destruction of underlying tissue.

Operative interference should, in the opinion of the writer, be limited to a division of the anterior surface of the abscess and evacuation of the pus. The Saemisch incision is strongly advocated and practised by leading ophthalmic surgeons. This operation, however, has a serious disadvantage in that the anterior chamber is opened, the aqueous escapes, and anterior synechiæ or dislocation of the lens result as a direct consequence. It is advisable, and ought to be performed in those cases only in which perforation must occur or has occurred, and when the consequences of the operation are to be preferred to the greater evils of spontaneous or uncontrolled perforation.

The supplementary treatment may be dismissed with the briefest mention. In the formative stage: leeches, blisters, antiseptics, hot-water bathing, pressure bandages, laxatives, supporting measures, and liberal diet are required. In the convalescent stage: astringents to the lids, and cauterization of the ulcer with electricity or strong solutions of nitrate of silver.

Mrs. S., æt. thirty, an emaciated, delicate woman, completely exhausted from nursing a fifteen months' old baby. This exhaustion was in all probability the cause of the disease. She was too weak to leave her room, and so discouraged that she feared each day would be her last. The abscess was situated on the lower inner quadrant of the cornea, measured about four millimetres in diameter, and involved all

the layers of the cornea except the deepest. The epithelial surface was elevated by the pus. Hypopyon and unguis, neighboring cornea clear; iris dilated, but not adherent. The patient had been under treatment at a dispensary for two weeks before my first visit, and was using a solution of cocaine, atropine, and boracic acid locally, and iron and quinine internally. She had but little pain, and no photophobia. Vision for large objects only.

The abscess was opened and scraped on two successive days, the knife passing through diseased tissue only. Instillations of eserine every three hours by day, and atropine twice during the night; washing with Panas's fluid and frequent hot-water bathing were ordered. The baby was weaned, and the patient given twelve grains of quinine daily with milk punches and nourishing diet. In three weeks all inflammatory symptoms had subsided, leaving a thick white cicatrix three millimetres in diameter without adhesions of the iris.

The cure in this case might be attributed to the operations, and the drugs given a second place, but practically this claim would not hold. The abscess at the time of the incision could hardly be regarded as a collection of pus with well-defined boundaries. The surface was already elevated, softened, and non-resisting, and the pus had found its way into the lowest section of the cornea. Under the influence of the eserine, it must either have been absorbed, as part of it undoubtedly was, or driven to the surface by pressure against each other of the layers of the cornea excited by the eserine.

A CASE OF TREPHINING FOR TRAUMATIC EPILEPSY.

BY KNUT HOEGH, M.D.,
OF MINNEAPOLIS.

H. D., thirty-one years old, born in Norway, farm laborer, first seen November 4, 1889. He gave the following history, which was confirmed by his three brothers who accompanied him. When about two years old was shot by accident with slugs, producing numerous wounds of face and neck, and one of the forehead over the left eye. Profuse hæmorrhage and severe convulsions immediately followed. The child recovered, the frontal wound suppurating for about six months. After this he enjoyed good health until he was between sixteen and eighteen years old, when he had several epileptic attacks, the first coming on when he was in bed asleep in the early morning. His first attack was followed by an acute illness of two weeks' duration, and of unknown nature. He was again well and free from epileptic seizures for several years, when they returned with longer or shorter intervals. They would come in a series of two or three seizures within twenty-four hours, sometimes by day, at other times by night, and then there would be weeks or months of immunity. When about twenty-three years old, he shot himself in the leg while hunting in the mountains and nearly perished from hæmorrhage. After this accident a condition of melancholia developed; he lost interest in his work, became morose, had delusions of persecution, etc., for which he was sent to an insane asylum. He was discharged in about five months and was perfectly well with the exception of one single epileptic fit. He emigrated to America when about twenty-nine years of age, and earned a living as farm laborer and woodsman, being a steady worker, only rarely and moderately indulging in alcoholic stimulants. But soon after his arrival here he became again subject to fits, which made their appearance with increasing frequency, so that lately he has had three or four every month. Simultaneously with the advent of the epileptic attacks he became subject to a constant headache, which to him seems to start from the left side of the forehead.

Upon examination of the quite strongly built patient, there are seen several scars on face and neck, and one quite large, somewhat depressed and irregular cicatrix one and one-half inches above the left supraorbital margin, nearly two inches to left of the mesial line. It seems to be attached to the frontal bone, is white and tender on pressure; no convulsions are elicited by irritating the scar. Careful examination fails to detect any lesion of internal viscera; urine contains no albumin; pulse 72. Patient has a stolid expression of face, answers questions slowly and with a certain hesitation; there is a marked contrast between him and his bright and intelligent brothers, one of whom has observed him during several attacks and states that they are ushered in by a cry, that they are accompanied by twistings of the body, biting of tongue, and foaming at mouth, but that they do not begin in any particular group of muscles. A maternal uncle and aunt are said to have been insane.

A very excellent physician who had seen the patient formerly had given him medical treatment without benefit, and had advised an operation.

The patient was admitted to St. Barnabas's Hospital, November 6th, and after a full bath, the anterior part of the scalp was shaved and covered by sublimate dressings. The operation was performed the next day in the presence and with the advice of Drs. Burnside Foster, W. A. Jones, the house surgeon Dr. E. Wood, and P. A. Aurues, medical student. A hypodermic injection of ¼ grain of morphine was given and chloroform was administered, while the scalp was washed with oil of turpentine, alcohol, and a 1 : 1000 sublimate solution in acidulated water. The surrounding parts were covered by towels wrung from corrosive sublimate solution; the operator's and assistants' hands had been carefully disinfected; instruments had been sterilized by boiling for twenty minutes; sponges, cloths, dressings, and operating gowns by steam of 212° F. for half an hour, needles and silk by one hour's boiling. A horseshoe-shaped flap with its base outward embraced the scar and surrounding tissue, and was carried down to the periosteum. After the flap had been reflected outward, it was seen that the external scar did not correspond to the scar in the bone, which had to be exposed by an incision running horizontally inward for two inches. The scar in the bone was vascular, rough, and somewhat

depressed. A one inch trephine was applied and easily cut through the unusually thin bone. On the inside of the bone disk was found firmly fixed an irregular piece of lead, the size of a small pea, and several smaller grains of lead. The dura mater was adherent around the disk, somewhat thickened and slightly adherent to the underlying brain, which seemed rather reddish. The longitudinal sinus was not encroached upon, but the falx cerebri was seen dipping down between the hemispheres. The dura was laid open by a cross-cut, which produced some hæmorrhage, a few strands of disinfected horsehair were put in for drainage, and the dura was sewed with antiseptic catgut. The removed bone disk, which had been kept in a warm sublimate towel, was freed from the adherent lead by means of a chisel and replaced in the opening. No antiseptic or other irrigation was used in the wound, the blood and bone-dust being removed with sterilized gauze. The wound was sutured, leaving an opening for the horse-hair drain, and dressed with iodoform, sterilized gauze, and a bandage.

The patient looked pale after the operation, but recovered well from the anæsthetic and there were no other untoward symptoms. The horse-hair drain was removed on the second day; there had been some bleeding. Sutures, removed the fourteenth day, were found dry, and union by first intention had taken place everywhere. In the evening of the twelfth and morning of the thirteenth and again on the twentieth day, there were slight epileptiform attacks. The headache had entirely disappeared. The patient left the hospital on the twenty-first day. He had been put upon twenty grains of bromide of sodium, and five grains of iodide of sodium *per diem*, which he has been taking to this day. He has had up to the present writing—forty-fourth day—no new attack. He looks brighter, more contented and livelier, than when first seen. The bone disk is firmly implanted in the hole in the calvarium, and around its margin is felt a slight thickening as of callus.

This case seems to confirm Lucas Championnière's statement that trephining, properly executed, is comparatively free from risk; it also exemplifies the utility of Macewen's plan of implantation of the bone disk. It is too early to judge about the therapeutic effect of the trephining, except that it has relieved the headache and done no harm.

CLINICAL MEMORANDA.

OBSTETRICAL.

A Case of Measles followed by Pneumonitis and Premature Labor in a Primipara.—On the evening of Sunday, December 1, 1889, I was called to see Mrs. D. F., a woman of about twenty-four years, in her ninth month of pregnancy. After an examination I found that she was apparently suffering from the premonitory symptoms of measles, two of her brothers having just recovered from that disease. She was very uncomfortable, with general prickly sensations; was at times in great pain through her limbs, and was constantly coughing. Temperature 103.5° F.; pulse 120. She was given a diaphoretic mixture and antifebrin, with directions to take the medicines alternately every half hour until she felt somewhat relieved. The next morning I found her considerably easier, cough less dry, and the eruption beginning to appear. Temperature was now 100° and pulse about 90. From that time until Tuesday evening she seemed better, and strong hopes were entertained that the disease would run its usual course. On Tuesday evening I found a decided change for the worse: cheeks flushed, cough again dry and hacking, with severe pain in the lower lobe of the right lung. Physical examination revealed dulness over this lobe, proving to my mind that pneumonitis had set in. Temperature 104.5° and pulse 124; breathing very short and labored. The case began now to wear a serious aspect, and I entertained grave doubts as to its termination. The patient was rolling in bed from one side to the other, the cough was intensely wearing, and caused severe paroxysmal pain in the abdomen. I expected from the severity of the symptoms that labor might set in at any moment; but she remained in this condition until Thursday night, when I found her still very restless, coughing severely at times, complaining of intense backache and bearing-down pains. The physiognomy in its concentrated expression of agony was such as I shall never forget. On examination I found the os well dilated; the liquor amnii had escaped probably during coughing; the head was well down. I gave her occasionally small doses of quinine. After an hour or so the pains, which had grown weaker, almost ceased, or, at least, became inefficient, and I advised the forceps. This was agreed to: the forceps were applied, and a few minutes after, the mother was delivered of a well-formed boy. The uterus did not immediately contract, and, fearing hæmorrhage, I administered a drachm dose of Squibb's ergot. This, together with vigorous manual manipulation, soon caused contractions, and in an hour the placenta came away. The patient was now given some strong coffee with two drachms of brandy. The child was somewhat spotted, as though he had gone through an attack of measles in utero; but certainly at the time of birth was well. The mother reacted well; but this was of short duration. Soon the fever and pain in the chest returned, and her life for the next five days hung in the balance. Her temperature ranged between 103° and 104.5°; the pulse was constantly over 120, very weak, and thready. By antipyretics and sponging the temperature was temporarily reduced, but soon rose again. She was given egg-nog and milk-punch as food, and, medicinally, carbonate of ammonium and digitalis, with antifebrin and quinine alternately. On the sixth day after labor the temperature fell from 104.5° to 101°, and the pulse to 100. After this it rose once or twice above this point, but it was apparent that the crisis was passed. She was now put upon iron, nux vomica, quinine, and digitalis.

There are several features in this case which probably assisted in the ultimate favorable result:

1. Holmes's dictum of beginning two hundred years before birth to attain a result might well apply to her—she comes from a sturdy, strong farmer's stock.

2. She had improved on this sturdy graft by out-door farm-work.

3. She was a person of very cool temperament, and never once uttered a complaining word.

4. She was well nursed throughout her illness.

5. She was given during the entire course of her sickness nothing but *milk* with, at intervals, egg-nog and milk-punch.

6. And, finally, her case was studied from day to day. Medical treatment was specially directed to save (1) any unnecessary exertion; witness the application of the forceps, the Credé method of delivering the placenta without effort on the part of the patient. (2) Care in preventing even the slightest loss of blood. (3) Keeping up the strength of the heart with digitalis, ammonium carbonate, and brandy when indicated.

Literature.—Lusk[1] says: Rubeola is an infrequent complication of pregnancy, but is serious on account of its becoming hæmorrhagic, producing metrorrhagia, fatal to mother and child. Pneumonitis is a very frequent and dangerous complication of puerperal rubeola. And, again,[2] pneumonitis is an infrequent complication of the pregnant state, but affects the course of the latter very prejudiciously. . . . The fatal character of intercurrent pneumonia is referred to coexisting hydræmia, and to the inability of the poorly nourished heart to restore the balance of a pulmonary circulation disturbed by the consolidation of lung tissue and by the consequent impermeability of large capillary areas. Pulmonary œdema, resulting from progressive cardiac asthenia, "directly influences the fatal issue."

See also *W. W. Jaggard:* Pepper's System of Medicine, vol. iv. pp. 426, 430.

Fasbender: Ueber Pneumonia als Schwingersch. Complicatie. Beiträge zum Geburtsh., iii., 1874, Sitzungsber., p. 54.

Gusserow: Pneumonie bei Schwangeren. Monatschrift für Geburtskunde, xxxii., H. ii. 1868, S. 93.

Hirst: System of Obstetrics, vol. i. p. 449.

H. A. FOETUIN, M.D.
OVERISEL, MICHIGAN.

MEDICAL.

Local Applications of Sulphur in the Treatment of Diphtheria.—In the local treatment of diphtheria situated *above* the larynx, I find it of great advantage to preserve the false membrane as long as it will remain in its place. The diphtheritic membrane answers admirably, after having first applied a non-irritating disinfectant over it, to retain the medicament used and to *dress* the diphtheritic spots in the mucous membrane beneath.

The false membrane may be disinfected by irrigating it with a solution of any of the soluble disinfectants. The medicament afterward applied to the diseased areas should be slow of solution or insoluble. I have found washed sulphur to act well for this purpose. It may be insufflated, or, as I prefer, applied with a wad of absorbent cotton wound on the end of a stick, or with a large camel's-hair pencil. If well packed into the meshes of the membrane, from three to five applications in the twenty-four hours are sufficient; twice during twenty-four hours will answer in mild cases. Patients old enough to express themselves frequently assert, soon after the sulphur has been applied, that their throats feel better. Probably the sulphur, while in the meshes of the moist, warm, false membrane, takes up oxygen and sets free sulphurous acid, thus keeping the part in constant contact with this powerful germicide.

Calomel, also, answers well, but it should be used with care, and a known amount applied each time, and the applications made less frequently than sulphur. The applications of either sulphur or calomel should be made after the patient has taken nourishment, so that the medicament may remain on and in the meshes of the membrane for as long a time as possible. Of course, this precaution need not be observed when the nasal passages are treated.

FRANK N. DRAKE, M.D.
TUSCARORA, NEVADA.

[1] Science and Art of Midwifery, p. 251. [2] Ibid., p. 257.

HOSPITAL NOTES.

ANEURISM OF THE POPLITEAL ARTERY. AMPUTATION OF THE BREAST. DOUBLE HARELIP. RETENTION OF URINE. NÆVI OF THE SCALP.

Abstract of a Clinical Lecture delivered at the Hospital of the University of Pennsylvania,

BY JOHN ASHHURST, JR., M.D.,
PROFESSOR OF SURGERY IN THE UNIVERSITY.

DR. ASHHURST presented a patient with a moderately large, thin-walled aneurism of the right popliteal artery, associated with valvular disease of the heart, and described the symptoms of aneurism in general as those of a pulsating tumor in the position of a large artery, the character of the pulsation being expansile, and not simply an up-and-down motion, as in the case of a solid tumor. In the present case there was some enlargement of the superficial veins, due to the pressure of the tumor upon the deeper veins. In the treatment Dr. Ashhurst proposed first to resort to digital compression, and requested assistance from those of the class who were so disposed. But if in three or four days compression did not prove effective, he would abandon it and ligate the artery above the sac. Compression, he said, acts by lessening the blood-current which enters the sac, allowing this to contract and permitting laminated clots to form.

The next patient presented was a woman who had been in the hospital several months previously for a small ulcer of the breast, with a retracted nipple and considerable induration. Dr. Ashhurst at that time was not satisfied that the disease was cancerous, and after the use of adhesive straps and careful dressing the ulcer healed. A few weeks later, however, ulceration returned, accompanied by considerable pain, and, as he now believed the breast to be in a pre-cancerous stage, he proposed amputation. The retraction of the nipple he considered usually characteristic of scirrhus.

He began the operation by an elliptical incision above and below the nipple. The flaps were then dissected up, leaving no more fat than was necessary, and the dissection was continued around the tumor down to the pectoral fascia. He said that in removing a tumor it was desirable to avoid cutting into it, as, if the growth is malignant and is opened, there is a possibility that the cells will be distributed and form starting-points of new growths. After removing the mass he incised it and found it indurated, with a tendency for the cut surface to

become concave, the latter being due to the presence of yellow elastic tissue. He did not open the axilla, as there was no induration of the axillary glands. The latter procedure adds to the gravity of such an operation, often gives an unsatisfactory ultimate result, and impairs the future usefulness of the arm, as the cicatrix tends to bind the arm to the side. For this reason he believes that in the majority of cases more good will be done by not opening the axilla unless there is strong reason to think that the glands are involved. After the hæmorrhage had been controlled he made a small opening in the flap, through which he inserted a drainage-tube. He then closed the wound and applied an antiseptic dressing and bandage, stating that if oozing occurred a second bandage would be applied with more pressure. The dressing would probably not be disturbed for several days or a week.

The next patient was a baby with double harelip. When, as is unusual, the harelip is double, the portion between the two clefts, corresponding to the intermaxillary bone of animals, often projects, as it did in the case before the class. The protruding portion turned up and was attached to the columna of the nose, but there was no cleft palate. Dr. Ashhurst first separated the columna from the projection, and cut this away with strong forceps. This was followed by some bleeding, which was checked by touching with a Paquelin cautery. The columna was then trimmed into a triangular shape. An important point in the operation was to separate freely the lip from the bone on each side, so that the former might be drawn well forward without much tension. The edges of the clefts were then freshened, in a concave direction, so that the resulting cicatrix would be longer than the natural depth of the lip, the object of this being to prevent the formation of a notch as the scar contracts. To control hæmorrhage while the edges were being freshened the operator used spring clips. He then inserted the pins, passing them through the entire thickness of the lip, which he had found the most satisfactory method, and reinforcing them with several silk sutures, and the usual figure-of-eight. A small piece of cotton saturated with compound tincture of benzoin was placed over the wound, and over this a strip of adhesive plaster. The pins should be removed on the third day, but the sutures and figure-of-eight ligatures allowed to remain two days longer.

A man was then presented suffering from retention of urine, caused by urethral stricture. Dr. Ashhurst said that he would first try to pass a catheter, and if he failed in this would open the urethra through the perineum. As stricture always occupies that portion of the canal in front of the prostatic part, by opening the urethra at the apex of the prostate we are certain to get behind the stricture, which can be dealt with subsequently.

In the present case the patient was carefully covered with blankets, as it is important to prevent chilling; and Dr. Ashhurst began with an ordinary sized catheter, not expecting to pass it into the bladder, but to determine the seat of obstruction. The stricture was found to be quite anterior and would not admit the catheter. He then used a filiform bougie with a corkscrew-shaped end, which readily passed, and over this was threaded a tunnelled catheter. This passed down to and was arrested by a second stricture. A smaller tunnelled catheter was then substituted, which readily entered the bladder guided by the filiform bougie. The instrument was then tied in place, and in twenty-four hours it would be found that a larger bougie could be passed. The stricture would then be treated by gradual dilatation.

The next patient was a baby with two nævi of the scalp and others on different portions of the body. Those on the trunk were not sources of disfigurement and required no treatment. For the largest nævus on the head Dr. Ashhurst said that he would employ the quadruple ligature, ligation being the most satisfactory method of treatment, and rarely followed by unfavorable results. He has had but one death following ligation of a nævus —a child operated on at the Children's Hospital. The nævus was at the root of the neck close to the great vessels. After the operation the child was taken out by the mother, an intemperate woman. It died some time later, but it was not certain whether the result was to be attributed to the operation or to neglect.

The quadruple ligature is applied by two needles passed through the base of the tumor at right angles to each other, each needle having a double thread. The needles are then removed, leaving four threads. The ends of these threads are tied together so as to make a continuous ligature. The strain, of course, comes on the last knot, and it is this that accomplishes the strangulation of the growth. The last knot is tied slowly, so as to thoroughly constrict the mass. In a few hours the nævus will become black and a line of separation will form; the slough will then be thrown off and a granulating surface remain. To the smaller nævus on the scalp Dr. Ashhurst used fuming nitric acid, working it in with a small stick until a thick slough formed. This, when it separates, leaves a healthy surface.

MEDICAL PROGRESS.

The Induction of Premature Labor.—M. BOISARD has recently contributed an excellent paper upon the usual means employed to induce premature labor. Considering first the uterine douche, he gives it his unqualified condemnation, and believes that the process is one which should be absolutely rejected, being slow, unreliable, and dangerous. Before contractions can be induced, it is often necessary to use the douches three or four times daily for four or five days: often they fail entirely. Moreover, they act only because of the traumatism caused, or, in the words of the author, they are a sort of aquapuncture. Fatal accidents with the method have been reported by Tarnier, Simpson, Olshausen, and others. Pinard has made a number of experiments which show that gentle irrigation is absolutely powerless to provoke labor.

Among the mechanical agents used for this purpose the most usual are sponge and laminaria tents. If either is used, it should be the latter, as it is much more difficult to render sponge aseptic. Tents, however, have the disadvantage of slipping out of place, of dilating slowly, and, particularly with the laminaria, successively larger tents must be introduced. Their use should be confined to primipara in whom the os is small and rigid.

Puncture of the membranes, though infallible, is dangerous, slow, and inconvenient; often causes lesions

of either the uterus or fœtus, and favors procidentia and abnormal presentations. There are certain conditions, such as hydramnios, in which the method is useful to produce depletion of the uterus.

The author then discusses the use of bougies and balloons, methods which he terms "excitor" and "excito-dilator." The insertion of a bougie is the simplest and most easily applied of all methods, but acts very slowly, sometimes fails, and has in a few instances caused accidents, such as perforation of the membranes and wounds of the placenta. It is usually necessary for the bougie to remain in the uterus for three or four days to produce contractions. The balloon dilators of Tarnier or Champetier offer the most satisfactory method yet described for the induction of labor. Champetier's dilator is better than Tarnier's, being larger, of a better shape, and not distensible. It dilates not only the os, but the entire vulvo-vaginal canal. With this instrument the average duration of labor is from twelve to fourteen hours. The disadvantages of the balloon are that it is sometimes difficult to adjust, and that it may cause rupture of the membranes, separation of the placenta, pushing back and alteration in the position of the child or prolapse of the limbs or cord. In eighteen patients treated by the author, there were two cases of ruptured membranes, one of placental separation, and three of prolapse: none of the cases terminated fatally in mother or child. Notwithstanding these disadvantages, the use of the balloon is the most rapid, safe, and satisfactory of all methods for the induction of premature labor.—*Journal de Médecine de Paris*, January 19, 1890.

The Treatment of Ozæna.—DR. MOURE, in *La Tribune Médicale*, writes that in a patient suffering from ozæna, the general condition should be modified by the administration of iodine, arsenic, etc., and, if possible, by a residence at the seaside, which usually gives the best results. The local treatment consists chiefly in the use of irrigations, which should be abundant and at a temperature of about 85° F. The author commences treatment by using one pint of water containing five drachms, either of sodium chloride, sodium bicarbonate, or potassium chlorate. Immediately after this he uses an antiseptic solution, varying the antiseptic from time to time. The following may be used at the beginning of treatment:

℞.—Carbolic acid . . . 2½ drachms.
Glycerin . . . . 1½ ounces.
Alcohol . . . . 6 drachms.
Water . . . . 5 ounces.—M.

One teaspoonful is to be added to one-half pint of warm water and used as an irrigation. After this solution has caused a disappearance of the characteristic odor, usually within two weeks, it is replaced by a solution of chloral, resorcin, salicylic acid, sodium salicylate, or creolin. The latter is very irritating, and should be used in a weak emulsion, as follows:

℞.—Creolin . . . . 15 minims.
Alcohol . . . . 2 drachms.—M.

One teaspoonful to a pint of tepid water. The following may also be used:

℞.—Aluminium aceto-tartrate 3 to 6 drachms.
Boric acid . . . 2 to 4 ounces.—M.

One teaspoonful to one pint of tepid water. After a time Moure uses the usual astringent solutions, and when the mucous membrane is dry the following:

℞.—Salol . . . . . 75 grains.
Vaseline . . . . 4 ounces.—M.

—*Journal of Laryngology and Rhinology*, February, 1890.

Rhubarb as an Anthelmintic.—According to the *Medicinisch-chirurgische Rundschau*, February, 1890, rhubarb, given in the following mixture, is an efficient remedy against oxyuris vermicularis, or thread worm:

℞.—Tincture of rhubarb . . 30 drops.
Magnesium carbonate . 3 grains.
Tincture of ginger . . 1 drop.
Water . . . . 3 drachms.—M.

This dose is to be administered three or four times daily.

Prescription for Dysmenorrhœa.—The following is recommended in the *Wiener medicinische Wochenschrift* for dysmenorrhœa:

℞.—Ext. of Indian hemp } of each ⅓ grain.
Ext. of belladonna }
Cacao butter . . . 1 drachm.—M.

Mix and make five suppositories. For five nights before menstruation a suppository is to be introduced into the rectum. [There certainly could be no risk in increasing the first two ingredients to twice the amount here given.—ED.]

Resection of the Sternum.—At a recent meeting of the Hamburg Medical Association DR. MENING showed a patient on whom he had successfully performed resection of the sternum eleven months previously. For nearly four years a sinus had existed at the left border of the sternum, and constantly discharged cheesy pus. The entire bone was roughened. A free incision in the form of a cross was made, the greater portion of the sternum, including half of the manubrium, the gladiolus, and xiphoid process were removed, together with a large part of the costal cartilages. The carious bone was nearly four inches in length. Behind the sternum was found a large collection of cheesy pus, which was carefully cleared away. No disturbance of the respiratory organs was noticed after the operation, the wound healed satisfactorily, and the patient entirely recovered. —*Deutsche medicinische Wochenschrift*, February 6, 1890.

Application for Erysipelas.—In the local treatment of erysipelas, PROFESSOR PETRESCO employs carbolic acid in the following mixture:

℞.—Carbolic acid . . . 14 minims.
Collodion } . of each 6 drachms.—M.
Glycerin }

An Inhalation for Phthisis.—PROFESSOR PETRESCO, of Bucharest, uses the following for inhalation in pulmonary phthisis:

℞.—Eucalyptol
Oil of turpentine } of each 3 drachms.
Creasote
Iodoform . . . . . 7 grains.
Ether . . . . . 75 minims.—M.

To be used in an inhaler.

Insufflation for Ozæna.—COZZOLINO recommends the following powder for insufflation into the nostrils after the use of the douche in ozæna:

℞.—Salol . . . . . 35 grains.
Boric acid . . . . 20 "
Salicylic acid . . . 3½ "
Thymic acid . . . 1½ "
Pulverized talc . . . 100 " —M.
—*La Médecine Moderne*, February 15, 1890.

Prescription for Gonorrhœa.—According to JULLIEN, the following is a good injection in the second stage of gonorrhœa:

℞.—Mercury salicylate . . 1 grain.
Sodium bicarbonate . . 15 grains.
Distilled water . . . 4½ ounces.—M.

The Non-operative Treatment of Anal Fistula.—GUYON believes that fistulæ which do not give rise to distressing symptoms should not be operated on, but treated by palliative measures. The stools should be rendered regular and soft, and scrupulous cleanliness must be insisted upon. Internally, iron associated with the bromides may be administered according to the following formula:

℞.—Bromide of potassium . . 75 grains.
Citrate of iron and ammonium 4 "
Syrup of orange . . 2 ounces.—M.

One tablespoonful twice daily.

After each stool the following suppository should be introduced into the rectum:

℞.—Iodoform . . . . . 2 grains.
Extract of belladonna . . ⅛ grain.
Cacao butter . . . sufficient quantity.
—*London Medical Recorder*, January, 1890.

The Abuse of Intra-nasal Treatment.—In the *Internationale klinische Rundschau*, December 28, 1889, DR. RETHI, of Vienna, enters a protest againt the indiscriminate use of the cautery and snare in the treatment of intra-nasal disease. Though neuroses arising from disease of the turbinated bodies may often be cured by operation, he has noticed that in some cases they are increased, and that reflex conditions may even be originated by the cicatricial tissue which forms after operations. He reports three illustrative cases:

The first, a woman of twenty-five years, suffering from hypertrophic obstruction, was treated by thorough cauterization. In about ten days she began to suffer from violent and increasing attacks of headache and paroxysms of sneezing. Cocaine temporarily relieved the attacks, but later the author was obliged to excise the cicatrices, after which the patient recovered.

The second patient suffered from attacks of vertigo following cauterization of the turbinals with chromic acid. This case also was relieved by removal of the cicatrix.

The third case resembled the first, and was cured in the same manner.

Puncture and Injection in Hydrarthrosis.—DR. FALCOZ has recently described, in the *Archives Générales de Médecine*, his method of treating hydrarthrosis by puncture and injection.

The diseased joint is first carefully washed with soap, then with sublimate solution, and, finally, with a mixture of alcohol and ether. A small trocar is used, having first been heated, washed with carbolic water, and oiled. The joint is then punctured, the synovial fluid evacuated, and the cavity is washed out with carbolic lotion 1 to 20, about two ounces being injected. This fluid is drawn off, the articulation emptied, and the carbolic solution again injected as before. The small opening made by the trocar is then occluded by means of a little collodion, and the limb is placed in a plaster dressing. At the end of two days the dressing is removed, and if a little of the fluid still remains, energetic compression is applied. It is very seldom that, after the second dressing and a little massage, the limb does not resume its normal state.

Dr. Falcoz summarizes his results as follows: Of sixteen hydrarthroses, thirteen resulted in complete and permanent cure; one of the remaining three had acute arthritis; one was treated with tincture of iodine; one was still under treatment.

Ten hydrarthroses were treated by simple puncture, and six by puncture followed by antiseptic washings. One of these hydrarthroses was particularly interesting, inasmuch as the simple puncture brought no favorable result, but the patient was completely cured by puncture followed by injection.

The conclusion seems justifiable, that the treatment by puncture and injection, inefficacious in cases of acute arthritis, always succeeds in chronic hydrarthrosis. Whether the hydrarthrosis originates under the influence of rheumatism or traumatism is of little importance; the essential factor is that there should be no acute inflammation in the joint, in order that, after having freed the articulation of its liquid, the irritating properties of the carbolic acid solution may prevent its re-formation. The operation, without being in the least complicated, exacts rigorous antiseptic precautions, neglect of which could easily transform a simple chronic hydrarthrosis into a purulent arthritis.—*Medical Chronicle*, February, 1890.

Ammonium Picrate in Malaria.—DR. STUDENEZKI has recently administered ammonium picrate, as recommended by Dr. H. M. Clark, in sixty-two cases of intermittent fever. He is of the opinion that the drug is valueless as a substitute for quinine, as it does not lower the temperature; but, instead of causing gastric disturbances, it relieves them if they exist. The author considers that the drug is indicated in patients suffering from apyrexial forms of malaria, and who have not become cachectic. He thinks it may be given with advantage on the afebrile days of an attack of ague. Six grains may be taken in twenty-four hours without unpleasant consequences.—*Lancet*, February 15, 1890.

THE MEDICAL NEWS.

A WEEKLY JOURNAL

OF MEDICAL SCIENCE.

COMMUNICATIONS are invited from all parts of the world. Original articles contributed exclusively to THE MEDICAL NEWS will be liberally paid for upon publication. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

Address the Editor: H. A. HARE, M.D.,
1004 WALNUT STREET,
PHILADELPHIA.

Subscription Price, including Postage.

PER ANNUM, IN ADVANCE . . . . . $4.00.
SINGLE COPIES . . . . . 10 CENTS.

Subscriptions may begin at any date. The safest mode of remittance is by bank check or postal money order, drawn to the order of the undersigned. When neither is accessible, remittances may be made, at the risk of the publishers, by forwarding in *registered* letters.

Address, LEA BROTHERS & CO.,
NOS. 706 & 708 SANSOM STREET,
PHILADELPHIA.

SATURDAY, MARCH 8, 1890.

THE VALUE OF VIVISECTION RECOGNIZED BY ITS ENEMIES.

DURING the past week members of the Anti-vivisection Society have caused the arrest of Dr. Benjamin Shimwell, of Philadelphia, upon the charge of having been guilty of "wanton cruelty" to an animal upon which he demonstrated to a class of students a new modification of Senn's operation for wounds of the intestine. While realizing that their failure to obtain an anti-vivisection law some years since necessarily prevents any general onslaught upon scientific research, these persons evidently intended in this instance to make a test case under the Cruelty to Animals Act, with the view of impeding the labors of other more prominent members of the profession, and ultimately preventing in this manner all vivisection in Pennsylvania.

Having subpœnaed a large number of witnesses for the prosecution, several of whom were physicians, the enemies of original work felt quite confident of the success of their cause, and were represented by the son of Mrs. Thomas Earle White, one of the leading members of the prosecuting society. On the other hand, the friends of the defendant were represented by Mr. Ezekiel Hunn and Mr. Beck, the Assistant United States District Attorney. During the trial before Magistrate Eisenbrown, the circumstances of the operation in question were described with considerable detail by the witnesses called by the prosecution and, finally, Dr. Owen Wister and Dr. Garrettson were placed upon the stand as experts, to testify that the operation was needless and cruel. The first gentleman confessed that he was not an expert, but an ordinary physician, and allowed, as did Mr. White, at least for the sake of argument before the court, that vivisection was of value, but only when performed for the establishment of a fact, and not when an operation had already been frequently repeated. In the latter cases he thought that it was unnecessary cruelty, but in the present instance was unable to testify as to there being any pain inflicted, because he persisted that he knew nothing of the case in point. In reply to a question by Mr. Beck, he stated that he did not even know what operation was performed, or how to perform it if he did, and he also asserted, on cross-examination, that the most eminent scientific medical bodies in this country thought vivisection of value. The position of the witness was evidently that of the individual between the devil and the deep sea, and he did his cause more harm than good.

The next witness for the prosecution was Dr. Garrettson, who, as Dr. Shimwell's chief at the hospital, was in fact, if not in deed, an accessory to the act, in that he allowed his assistant to perform such work in the institution to which he was attached. Dr. Garrettson replied to the questions put by Mr. White and the defendant's counsel: "If the operation was performed twenty times a day for the benefit of the students at a college it would not be too much. Though," he added, with a smile, "I'd rather drop through the floor than say so, as I am opposed to the practice of vivisection." This from a prominent medical member of the Anti-vivisection Society, and one who a few years ago asserted, on the stage of the Hall of the Y. M. C. A., that he had "seen great tears roll down the dogs' cheeks as they smelt the walls spattered by the blood of previous victims," was received with applause by the persons present. So positive was Dr. Garrettson's testimony in favor of the defence, that the prosecuting attorney at once remarked that his case was lost, and that he confessed a defeat.

The court-room was crowded with prominent members of the profession, notable among whom were Drs. H. C. Wood, W. W. Keen, E. E. Montgomery, William H. Pancoast, H. E. Goodman, Frank Woodbury, John B. Deaver, and others.

Perhaps no better example can be obtained of two well-defined facts than the case just detailed. It illustrates the absurdity of a society made up of the laity, with a few medical men of peculiar ideas, attempting to dictate to one of the most learned, and at the same time the most kindly, professions in the world, as to what is or is not of value, and what is or is not unjustifiable cruelty; and it also shows that here, as in every instance where justice prevails, it is impossible for any ignorant individual or body of persons to interfere with the rights and privileges of an educated class simply because their opinions differ. But by far the most important result of this trial is to show one great dominant fact, namely, that because a man is an M.D., this is no reason for believing him a competent judge of all matters pertaining to medicine and surgery, and we congratulate Drs. Wister and Garrettson upon so frankly stating the truth concerning a branch of medicine with which they cannot be expected to be thoroughly versed, thereby avoiding disgrace to the medical fraternity, and affording an example to their deluded lay friends that they are not in every case experts and authorities.

Thus has one of the foolish freaks of perverted kindness once more killed itself by its own weapon, and we advise that the thousands of dollars spent annually in this silly crusade be devoted to the care and reformation of those of our own race who are sick morally as well as physically, and who are starving and freezing because of perversion of money from its proper humanitarian channels. Every one knows the limitations put upon the Society to Protect Children from Cruelty, and other similar institutions, because of lack of funds, and thousands of little ones die annually for the want of the breath of sea-air when the city's heat strikes them down, at a time when the anti-vivisection agitators are enjoying the mountains or sea, or at least spending money with an abortive and useless result, and direct harm to the future of medicine and surgery.

THE THERAPEUTIC USES OF IODOL.

ELSEWHERE in this number of THE MEDICAL NEWS is published a paper by DR. CERNA on the use of iodol, in which he details instances where the drug, when used internally or externally, did great good in diseases widely separated from one another. It has always seemed to us that the profession was too much inclined to pass this drug by as one which could only be considered a substitute for iodoform, and an almost useless addition to internal medicine. Some years ago Cervesato published the results obtained by him from its use in the treatment of scrofula and respiratory affections of a chronic type, and in the treatment of tertiary syphilis. He claimed that it does not readily produce iodism even when used in the dose of 15 to 45 grains a day, and that the stomach is not disturbed by its employment. Still further back Stembo wrote a paper asserting its value in diphtheria when it is applied locally to the affected area, using it alone, or in the form of a solution made up as follows: ℞.—Iodoli, ℈ss; alcohol, f℥ss; glycerini, f℥iiiss.—M. S. To be painted over the part.

The number of cases treated by him was seven, and every one recovered in from four to six days. The advantages he found consisted in its harmlessness, its lack of odor and taste, the painlessness of its application, as well as the avoidance of untoward after-effects.

In cases where a discharge from the middle ear needs a dry antiseptic powder iodol may be used in place of iodoform with success, and without the disagreeable smell of the latter drug. Under these circumstances Purjesz has found it useful in both the acute and chronic forms of this troublesome malady, as it always stopped the discharge in a few days in the acute attacks in his hands. When employed in the ear it may be applied once or twice a day, care being taken that it does not produce too much irritation in the part affected.

REVIEWS.

HISTORIA DE LA MEDICINA EN MEXICO DESDE LA ÉPOCA DE LOS INDIOS HASTA LA PRESENTE. (History of Medicine in Mexico from the Times of the Indians to the Present Epoch.) By FRANCISCO A. FLORES. Three vols. 8vo., pp. 1640. Government Press Offices, City of Mexico, 1886–1888.

WE hear so little from our sister Republic that we are sometimes inclined to believe that she is doing almost next to nothing with regard to medical or scientific matters in general. But we must confess that we have never examined carefully the position that Mexico occupies in the world of science, more especially in the world of medical science.

We forget, or perhaps we do not know, that the country has a great medical school in the City of Mexico, called the Mexican National School of Medicine (Escuela Nacional de Medicina), definitely established since the year 1833. At present it is magnificently fitted up with all modern improvements, and follows very closely in its teachings the French School of Paris. It has a fine faculty, most of whose professors have made their studies

in Europe, and, so far as the teaching is concerned, it has very fair facilities for the study of medical science. The city has quite a number of good hospitals, and to show that our professional brethren are not entirely idle, there are, we can positively state, a number of medical journals published in the capital, and a few in the different States of the Republic, which constantly bring to public notice well-studied and highly interesting cases, and also original articles on medical and allied scientific subjects.

Again, strange as it may seem, Mexico has (which, perhaps, no other country on the American Continent has, with the exception, of course, of the United States) a medical history, a history which will, no doubt, interest not only medical but scientific people at large, as it involves a period of several hundred years, and is intimately connected, in great part at least, with the social history of those highly intelligent ancient Mexican races which once inhabited "beautiful Anahuac."

We have before us a book on such a subject. It consists of three large octavo volumes of 1640 pages. It is the *History of Medicine in Mexico from the times of the Indians to the Present Epoch*, written in an interesting and pleasing style by Francisco A. Flores, graduate in pharmacy, and at present a student of medicine. It is preceded by a masterly preface from the pen of the eminent Mexican physician and philosopher, Dr. Porfirio Parra. The work is published by the Press Offices of the Mexican Government. The first two volumes have been ready since 1886, but it appears that the work was not given to the public until last year, when the third and last volume was printed.

On the whole, the work is a most interesting one, and reflects great credit upon its young and intelligent author, it being certainly a most valuable contribution, not only to medical literature in general, but also to American medical literature; and in order to do justice to Mr. Flores's able production, we propose to give subsequently a series of as careful reviews of it as possible, reviews which, we hope, will convey to our readers clear ideas of the book under consideration, and also about the interesting subject of which it treats.

TRANSACTIONS OF THE ASSOCIATION OF AMERICAN PHYSICIANS, FOURTH SESSION. Vol. IV., pp. 382. Philadelphia: W. J. Dornan, 1889.

OF the many volumes of transactions which annually come to this office, few, if any, contain so much of interest, or so valuable evidence of the progress of medicine as does this one. In vol. iv. we find papers by such well-known men as Minot, Stewart, Weir Mitchell, Henry, Musser, and Forchheimer, as well as a large number of others of equal rank and standing. Still others of the Association joined in the discussions of the papers as they were read, and this adds not a little to the usefulness of the book. One of the papers which, just at present, seems of unusual importance is that of Ernst on the danger of the transmission of tuberculosis by the milk of cows. The article by Dr. Busey on the effusion of chyle or chyle-like fluids into the serous cavities is also of great interest, while the article of Musser upon cancer of the gall-bladder and bile ducts is the most exhaustive account of this condition which has yet appeared, and is followed by a very valuable bibliography and list of cases, evidencing an amount of literary research which only those who have done similar work can appreciate.

STUDENT'S AID SERIES. Vol. V.: ANATOMY, SURGERY, AND PHYSIOLOGY. 12mo., pp. 236. New York: G. P. Putnam's Sons, 1889.

THIS volume is another of the series to which we have already called attention in previous numbers. It contains Aids to Anatomy, by George Brown, M.D.; Aids to Surgery, by the same author; and Aids to Physiology, by B. Thompson Lownes, M.D. As these important subjects are all considered in a duodecimo volume of 236 pages, it can readily be seen that no very great space can be given to any one of them, and in consequence the subjects are dealt with most superficially. Examination of the book shows, however, that far more is contained in it than one would imagine, and we doubt not that it may be of some service, particularly to the student who chooses, by the purchase of several similar books, to acquaint himself with all the necessary facts for the examination room.

STUDENT'S AID SERIES. Vol. VI.: CHEMISTRY, FORENSIC MEDICINE, AND TOXICOLOGY. By E. E. A. SEMPLE, M.D., and W. D. HEMMING, M.D. New York: G. P. Putnam's Sons.

AIMING merely to outline, without elaboration or discussion, the teaching of one or several schools in the particular branches indicated, this volume can fairly claim to fulfil its purpose. Rarely rising to the dignity of textbooks, the best realization of the object of such efforts demands that they clearly and precisely follow the views and system of one individual teacher. In endeavoring to become general in their usefulness, they are apt to be confusing so far as the necessities of the student preparing for his examination are concerned. For this reason, unless, by personal examination, he finds it corresponding sufficiently to the methods of his instructor, it would be unwise to recommend this work to the student in any particular school. As such works go, however, the volume is excellently compiled, its several subjects being carefully systematized, and its instructions stated clearly and briefly.

The book is divided into Inorganic Chemistry, Organic Chemistry, Legal Medicine, and Toxicology, the first two having been prepared by Dr. Semple, the latter two by Dr. Hemming. Although a foreign work, both compilers being residents of London, the differences in English and American laws are not sufficient to lessen the value of the chapter on Forensic Medicine, although most American teachers would probably hesitate to accept the classification of mental diseases and their discussion as given by Dr. Hemming.

SOCIETY PROCEEDINGS.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, February 6, 1890.

THE EPIDEMIC OF INFLUENZA.

In the discussion of the Academy of Medicine, in which a number of well-known physicians of this city

participated, there was a pretty general agreement as to the main features of the epidemic influenza and the severity of the complications. The only note of discord was struck by DR. F. H. BOSWORTH, who declared that, although his practice was chiefly in diseases of the respiratory tract, he had not seen anything in his daily work which warranted the statement that there was an epidemic of influenza. By an epidemic of influenza, he understood one which affected a large proportion of the people in a community, and which was accompanied by a peculiar and clearly recognizable train of symptoms. Colds were not most common in cold weather, but when the temperature is moderate and the atmosphere laden with moisture. He felt positive that whatever increase in the number or severity of the cases of respiratory disease had been noticed, could be explained by the unusual climatic conditions which had existed, aggravated by the influence of malaria. He thought it was nearer the truth to say that the epidemic was one of break-bone fever.

These radical views were not shared by the other speakers, for, as Dr. Jacobi said, the histories of previous epidemics show that they often occurred when there were no such peculiar climatic conditions, and that they had not infrequently visited snow-bound coasts. This statement was corroborated by Dr. Kinnicutt's remark that in the western part of this country the winter had been unusually severe, and yet the epidemic had been quite as extensive there as here.

DR. A. JACOBI formally opened the discussion by reading a paper upon the phenomena observed among children suffering from the influenza, the prophylactic measures that should be adopted, and the remedies that were of service in the treatment of the severe forms, and of the complications.

Children had not been frequent sufferers from the disease, and this was quite possibly due to their being less exposed to the inclemency of the weather. When they were attacked, the fever was usually moderate, possibly owing to modern methods of combating it, and the bronchitis was quite general, accompanied by but little dyspnœa, and with the usual scanty expectoration of childhood. Headache was an almost constant symptom, and was diagnosed in infants by the contraction of the frontal muscles and the dazed appearance of the little sufferers. Convulsions were occasionally observed, as was also delirium in a few cases having high fever. Vomiting was often present; loss of appetite the rule; and diarrhœa not uncommon. Conjunctivitis had not been among the first symptoms, and otitis media had only been occasionally observed. When the disease was complicated by pneumonia, bronchial breathing and bronchophony, which are usually prominent signs in the early stages of pneumonia in children, were not readily obtained; and dulness developed very slowly. The cases were frequently complicated by other conditions, such as pleurisy with effusion.

It is only after the second year of life that influenza affects children in the way described; before that time, the locality of least resistance is the alimentary tract. It was noticeable that the injected throats which are so common when scarlatina and diphtheria are prevalent, were not observed during this epidemic. When the oral cavity suffered, the tongue became red, the papillæ elevated, and even the gums were affected. Dr. Jacobi had met with the scarlatinous eruption mentioned by many writers in only two cases—one in a child of two years, having a slight fever, and the other where the temperature was 104°, and the whole surface covered with the eruption. Herpes had been seen occasionally, but urticaria not at all. Neither had he observed the paralysis mentioned by Da Costa. Pains in the extremities were very frequent, and in one case, where the ankle was the seat of a chronic epiphysitis, the influenza caused a marked exacerbation of the trouble.

Relapses of influenza were not so often observed in children as in adults, possibly because of the milder type of the disease, but more probably on account of the avoidance of the premature exposure and exertion which so frequently caused a return of the disease in older subjects.

There can be no doubt as to the miasmatic origin of the influenza in many well-authenticated cases. Dr. Watson, in his *Practice of Physic*, published in 1871, gave a notable instance of this. A ship having arrived on the coast of Devonshire during the prevalence of a land wind, forty of the crew were taken ill within half an hour, and on the following day no less than one hundred and sixty were on the sick list.

As regards the spread of the disease, and the question of contagion, E. A. Parker, in Reynolds's *System of Medicine*, calls attention to a number of cases occurring in the last century, which were traced to direct contact. It has been noticed in hospitals, that patients in adjacent beds caught the disease first. The disease seems to be not only miasmatic, but also intensely contagious, with a very short period of incubation.

In the light of this knowledge, it seems wise to refuse such patients admission to general hospitals, and to consider carefully the advisability of closing the schools during such epidemics.

In the treatment of these cases, quinine in small doses was found beneficial; and acetanilide, antipyrine, and phenacetin all rendered good service; but of the latter class, phenacetin is the best on account of its less disagreeable effects upon the brain, heart, and skin. The gastric irritation is best controlled by the administration of resorcin, salicin, or the salicylates, it being remembered that for infants and children the doses of these remedies are proportionately large. The great danger of the disease is from prostration and heart failure; and in the cases where there is much gastric irritation, the debility is still further increased by the difficulty of nourishing such patients. Recourse must be had to rectal alimentation; and where heart failure is imminent, cardiac stimulants, such as musk and sulphate of spartein, must be boldly administered.

DR. W. H. DRAPER continued the discussion, limiting his remarks to the consideration of the complications and the sequelæ. The former were, like the symptoms, divisible into two principal varieties—1st, those included in sensory and motor derangements resulting from the effects of the materies morbi upon the cerebro-spinal system; and, 2d, those illustrating the manifold and severe lesions which the disease determines in the mucous membrane.

The former variety is characterized by functional disturbances of the cerebro-spinal system, and the latter by

more or less severe inflammatory processes in the respiratory and alimentary tracts.

The most serious complications of the respiratory tract have been bronchitis, broncho- and pleuro-pneumonia, and pleurisy. Bronchitis has been confined mostly to one lung, and the expectoration has not been very abundant. In catarrhal pneumonia the signs of consolidation have been delayed for some days after the subjective symptoms have suggested its presence. The pleuritic element has been unusually pronounced, and the pain has been widely distributed and very intense. In croupous pneumonia, the pulse-respiration ratio has been more disturbed and defervescence has occurred somewhat earlier than is usual. Resolution has been slow, and in many instances this has been found to be due to the presence of small empyemas.

One case which illustrated the tendency occasionally shown by this disease to spend itself on the alimentary tract, at first simulated typhoid fever, and, later, colitis; but inasmuch as two cases of ordinary influenza occurred in the same family with pulmonary symptoms, it seems reasonable to suppose that this case was one of the rare forms in which the pulmonary catarrh is supplanted by the intestinal lesion.

DR. DRAPER had not seen any complications affecting the genito-urinary tract, and repeated examinations of the urine had not shown the presence of as much albumin as is common in other infectious diseases. Among the nervous complications may be mentioned neuralgias, which frequently make their appearance after the subsidence of the febrile and catarrhal symptoms, and are more or less periodic. They follow the course of the main nerve trunks and are aggravated by movement—two features indicating that the lesion determining them is a perineuritis.

Alcohol has been largely recommended both as a prophylactic and a curative agent; but from a study of cases, both in hospital and private practice, Dr. Draper had come to the conclusion that except in very moderate doses, it was decidedly detrimental. He had been very much impressed with the analogies presented by the influenza to other infectious diseases, and particularly to cerebro-spinal meningitis; and he thought the mucous catarrhs may perhaps be entirely due, as the cerebro-spinal symptoms are, to the effect of the poison on the vaso-motor system. This seems to be the only way to account for the great variety of the lesions and the sudden and overwhelming massive congestions.

DR. F. P. KINNICUTT then took up the subject, dwelling more particularly, however, upon the marked suicidal tendencies evidenced in some cases, and the peculiarities of the pulmonary complications. A nurse in St. Luke's Hospital suffered from vivid hallucinations of sight for several days following the febrile stage of the influenza. A rather remarkable family group had come under his observation in which the first child taken sick had only a single convulsion, followed by a well-developed broncho-pneumonia with tardy convalescence; the second child had slight convulsions from time to time during the week following the onset of the disease; and the third child, an infant of eighteen months, with no other symptoms excepting moderate bronchitis, had severe and almost incessant convulsions for a week, and then died. Such remarkable disturbances are seen in but few of the infectious diseases.

Broncho- and primary lobar pneumonia have occurred with nearly equal frequency in both hospital and private practice; but the severity of the former in adults, with an unusually free capillary hæmorrhage, as shown by bright red blood in the sputa, and the frequency with which the latter variety has involved both lungs, show most clearly the influence of the influenza upon them. In a case of pneumonia which terminated fatally the autopsy showed a lobar pneumonia in the stage of red hepatization in one lung and evidences of broncho-pneumonia in the other.

The cases of influenza which have occurred in St. Luke's Hospital may be summarized as follows: 15 cases of lobar pneumonia, both lungs being involved in 4, with 7 deaths; 9 cases of broncho-pneumonia with 3 deaths. An examination of the hospital records for the preceding six months showed that out of 16 cases of lobar pneumonia only 3 involved both lungs.

DR. M. A. STARR said that 42 per cent. of all the cases under his observation during the past six weeks had been attacked by the influenza, and then mental depression and peripheral nervous disturbances were pronounced. In many cases this mental depression amounted almost to a mild melancholia, and three of them had a decided suicidal tendency, associated with a slow pulse occasionally alternating with a very rapid one. In one case the pulse rose to 120 for periods of from fifteen to thirty minutes.

After certain epidemics chorea and poliomyelitis occur more frequently, and the movements of the former are temporarily increased in patients already suffering from the disease; but such changes had not been noticed in connection with the present epidemic. The pains of locomotor ataxia had, however, been perceptibly increased.

DR. R. GUITÉRAS, who had been fortunate in observing a considerable number of cases of the cutaneous variety, spoke particularly of these forms. From a diagnostic point of view, the most important variety was what he would classify as *Influenza Erythematosa*. He cited several cases of this in which there was a general blush of the body surface with rise of temperature, angina, reddened tongue, and other symptoms closely resembling scarlatina. Six cases were also observed in the New York Foundling Asylum. Apparently this form is most common in adult females. The eruption usually disappears within twenty-four hours.

In erythema the eruption is not punctate and is of a faint bluish-red tint; the tongue is covered with a heavy white coating; the papillæ are enlarged; and the skin is always moist. In scarlatina, on the other hand, the eruption is fine, punctate, of a scarlet color; the tongue is not so thickly coated and has a more distinctly strawberry appearance; and the skin is hot and dry.

Herpes labialis and miliaria have been occasionally observed, and Dr. J. H. Byron has noticed among the Italians at the New York Dispensary a peculiar bright red, coarsely papular eruption over the face, arms, and chest closely resembling erythema multiforme.

DR. BURKE has reported several cases of sore tongue, where the organ was large, red, hard, and so tender that pressure against the teeth was painful; the tongue "felt too large for the mouth," and was often allowed to protrude somewhat; the papillæ were enlarged and prominent, especially the group on either side of the

middle of the tongue. This peculiar condition usually made its appearance on the second or third day, and lasted for about one week. It was not an accompaniment of any particular type of the disease.

The number of deaths from influenza reported to the Board of Health during the past week were 121, of which number Dr. Guitéras investigated, with their attending physicians, 86 cases, with the following results: 33 from lobar pneumonia, 21 from lobular pneumonia, 13 from bronchitis, 4 from meningitis, and 15 from other diseases. Of the remaining 35 cases, the causes assigned on the death certificates were: Pneumonia 19, bronchitis 8, and other diseases 8. Of the 33 cases of lobar pneumonia, 28 occurred in men, only 4 being over fifty years old and only 1 under twenty years. Of the 21 cases of lobular pneumonia, 15 were in women; and of the 13 cases of bronchitis, 9 were also among women. Only 2 deaths were directly due to the influenza—1 in a debilitated Italian, sixty-one years of age, and the other a baby eight days old.

DR. A. L. LOOMIS commented upon the remarkable tendency of the cases of bronchitis in adults to become capillary, and said that when it did reach the finer tubes, a pleurisy was immediately established outside of and corresponding to the seat of the circumscribed capillary bronchitis. Convalescence was exceedingly tedious. It is remarkable that very few cases of capillary bronchitis developed into acute tuberculosis of the lungs.

At the Loomis Laboratory investigations were in progress with a view of establishing the existence of the peculiar bacillus of this disease, and many varieties of bacilli have been inoculated upon animals, but so far without success. He did not think that the lower animals were, as a rule, susceptible to this influenza.

In connection with the question of contagion, and the spread of the disease, it was interesting to note the success that had attended the quarantining of the Saranac Sanitarium for phthisical patients.[1] All connection with the outside world had been cut off, and not a single case of influenza had developed within that institution.

CORRESPONDENCE.

A HOMŒOPATHIST'S DEFENCE.

To the Editor of THE MEDICAL NEWS,

SIR: The time for vehement denunciation in scientific discussion has, or at least should have, long since passed. The unknown has so oft' been made plain, and the apparently impossible so frequently wrought, that the improbable dare not be thoughtlessly set aside. Medicine affords no exception. Ridicule and denunciation afford no argument against facts, and certainly they never can destroy truth, even though for a season they may retard its growth and development.

Thus ran my thoughts on reading an "An Ethical Question," by S. Solis-Cohen, M.D., which was honored by a place in a recent number of your journal. If I understand his article, he makes the following assertions:

First. There are those in the homœopathic school who implicitly follow Hahnemann, and there are others who, while they accept the law of similars as the law of cure, still do not accept Hahnemann's theories relative thereto.

Secondly. He asserts *his* view that to be a homœopathist one must accept all of Hahnemann's theories.

Thirdly. He asserts that Hahnemann rejected anatomy, physiology, semeiology, pathology, etc., and,

Fourthly. That consultation between the members of the two schools is practically impossible.

For the first and fourth of these assertions we will not ask time or space for a reply.

The second and third, however, are so glaringly false, that we desire, most heartily, to dissent.

To be a homœopathist does not of necessity involve a belief in, or acceptance of, any of Hahnemann's theoretical explanations. In fact, Hahnemann himself declares, in reference to theoretical explanations of the therapeutic law, § 28 *Organon*, "I attach but little value thereto."

Kepler accepted the Copernican system, but only to frame new and better explanations. In fact, the three laws known by his name have firmly established the law so imperfectly known to Copernicus. As well might the astronomer of to-day be denounced as a non-believer in Kepler's laws, because he rejects the erroneous fancies of that most astute observer, as to denounce the homœopathist who accepts the law, but rejects the theoretical explanations of Hahnemann. Nor would we reject Kepler's great laws because, that, under the influence of the faulty mechanical knowledge of his day, he evolved the theory of the vortices. Who will reject the Rudolphine tables because of the few errors they contained? Perfection is nowhere found.

Neither dare we require of Hahnemann faultless theory nor superhuman perfection. The law is true—the theories induced thereby, and even the results of man's application of the law, may abound with error. Our duty is to eliminate the error and develop the great truth expressed in the law. Blind adherence never has been, nor can be, yielded. With all honor to the founder of our school, we have been homœopathists, not necessarily Hahnemannians. Even in the copy of the *Organon* from which Dr. Cohen quotes may be read the following from the pen of Dr. Hering, one of Hahnemann's most ardent adherents:

"Whether the *theories* of Hahnemann are destined to endure a longer or shorter space, whether they be the best or not, time alone can determine; be it as it may, however, *it is a matter of minor importance.* For myself, I am generally considered as a disciple and adherent of Hahnemann, and I do indeed declare that I am one among the most enthusiastic in doing homage to his greatness; but, nevertheless, I declare also that since my first acquaintance with homœopathy (in the year 1821) to the present day I have never yet accepted a single theory in the *Organon* as it is there promulgated. I feel no aversion to acknowledge this, even to the venerable sage himself. *It is the genuine Hahnemannian spirit totally to disregard all theories*, even those of one's own fabrication, when they are in opposition to the results of pure experience. All *theories* and *hypotheses* have no positive weight whatever, except so far as they lead to new experiments, and afford a better survey of the results of those already made."

"Whoever, therefore, will assail the theories of

[1] See THE MEDICAL NEWS, February 15, 1890.

Hahnemann, or even altogether reject them, is at perfect liberty to do so; but let him not imagine that he has hereby accomplished a memorable achievement. In every respect, it is an affair of little importance."

Thus wrote Hering in 1835, yet he ever remained one of the most enthusiastic teachers of Hahnemann's law. The law we accept. Theoretical explanations of the law will be liable to change until science has become perfect.

The assertion that Hahnemann rejected the true teachings of anatomy, physiology, pathology, and diagnosis is absolutely groundless. In fact, in a paragraph just preceding that from which Dr. Cohen quotes in substantiation of his assertion, Hahnemann refers to "the meritorious work of many physicians in relation to the auxiliary sciences pertaining to medicine, such as the advancement of physics and chemistry, natural history in its different branches, and in that of man in particular, anthropology, physiology, anatomy, etc. He then especially declares, "I shall now only consider the practical part of medicine—that of curing." Can any unprejudiced reader require more explicit statement from Hahnemann, as to his reason for not further referring to these branches? His writings were directed to a profession supposed to be learned in such necessary matters; reference to them would therefore be unnecessary, save in so far as they were employed as foundations for erroneous theories. Any reader who will carefully peruse the introduction to the *Organon*, either in the original German, or in the Wesselhoeft translation, will readily see how different was Hahnemann's idea from that ascribed to him by Dr. Cohen.

The criticism in the first paragraph on page 433, vol. lv., of THE NEWS manifests either a lack of understanding, or an evident desire to misquote, on the part of the critic, for had he read, f. n. to § 7, *Organon*, he would have observed that Hahnemann recommended surgical procedures when necessary; he says, "extract irritating particles causing inflammation of the cornea," "avert the danger of a hæmorrhage, by exposing and ligating a wounded artery," "crush a vesical calculus," "open the imperforate anus of the newborn child:" while in § 13, Hahnemann speaks of "those forms of disease not belonging to manual surgery," and again, in § 186, he speaks of injuries to the body requiring mechanical skill, and refers to "extracting foreign bodies," "opening the cavities of the body to remove a molesting substance," as a tumor, "or to draw off effused or accumulated fluids," etc., etc. Evidence such as this shows most clearly that Hahnemann looked upon a thorough education in the collateral branches of medicine as essential, both to the development of correct judgment, as well as in rendering efficient aid to the sick. Hahnemann's opposition was directed against "the habit, wherewith so many physicians ambitious for fame have wasted both powers and time," "of weaving into so called systems, mere empty fancies and hypotheses regarding the internal nature of the life-processes, and of the origin of disease." The origin here referred to is not the *causa occasionalis*, which, he says, "It is taken for granted that every intelligent physician will search out and remove," but that hidden dynamic cause which is directly related to that all-pervading dynamis called the vital force.

That Hahnemann did not look upon this active force, or "dynamis," as independent of matter, will be evident to every reader of his essay on the "Mode of Propagation of the Asiatic Cholera," published in 1831, about a year before the fifth edition of his *Organon* went to press. Speaking of the spread of the disease through careless physicians and nurses, he says, "they take away with them in their clothes, on their skin, on their hair, and probably also in their breath, the *invisible (probably animated) and perpetually reproductive contagious matter* surrounding the cholera patient, and this *contagious matter* they unconsciously and unsuspectingly carry along with them throughout the town." Words of such import might well be attributed to a believer in the germ theory of to-day. While, however, Hahnemann acknowledged the necessary presence of matter, he, nevertheless, held to the view that such matter was necessarily imbued with a peculiar dynamis, through which it became endowed with potent virulence, just as to-day many view the bacteria and other micro-germs as but conveyers of poison—not the poison itself.

Again, Dr. Cohen asserts that Hahnemann discards all attempts at diagnosis. This is most certainly false; and for proof let me but refer to the careful diagnosis of "the genuine scarlet fever," as well as the differential diagnosis between it and the then existing "red miliary fever," falsely called scarlet fever, "Lesser Writings," pp. 479-483; also his remarks on "Asiatic Cholera," pp. 753-756.

In fact, he urged upon the profession the necessity for closer observation and more accurate individualization in disease, suggesting that class names should be used for convenience; he says, "we ought rather to say, a species of chorea, a species of ague," etc. Knowing that disease is constantly changing, new forms and combinations constantly arising, as instanced in f. n., § 73, *Organon*, he feared the misleading effect resultant upon the use of a specific name for such varied states. Hahnemann urges physicians to employ the "greatest care and systematic methods," and denounces "the loose and inaccurate methods in general use." Just here let me remark that in a letter written shortly before Hahnemann's death to Dr. Hering, he asserted the utility of pathology, if once founded upon a scientific basis.

The homœopathic school still adheres to the grand and comprehensive law discovered by Hahnemann, which is, and ever will remain, the only direct law of cure. We do not deny that palliation of diseased states may be secured through either of the other principles of drug action, and thus nature be imperfectly helped to a cure. We claim, however, for the law of similars, that under it we possess the speediest, safest, and most certain means whereby cure may be effected.

Regarding the infinitesimal dosage, sneered at by Dr. Cohen, we need only refer to the half century of successful practice of such men as Hering, Jeanes, and others, as sufficient answer. Infinitesimal doses, though strongly urged by Hahnemann in the *Organon*, were not the only doses recommended or used by him. In his article upon "The Cause and Prevention of Asiatic Cholera," he recommends drop doses of a strong solution of camphor given very frequently, "at least every five minutes;" he also suggests that some shall be evaporated near to the patient, that it may be inhaled; and further, recommends that enemata of warm water

containing small quantities of camphor be employed. This certainly is sufficient to show the falsity of the assertion that to be a homœopathist the prescriber must give infinitesimals only.

In reference to the term "spiritual," criticised by Dr. Cohen, let it be remarked that Hahnemann nowhere in the original uses the word; he says, "Geistartig," "dynamisch," *i. e.*, "spirit-like, dynamic." This term is applied to the force, which is invisible. Again, Hahnemann nowhere ridicules the *vis medicatrix naturæ* in the sense placed upon his words by Dr. Cohen. He ridicules the efforts made "to follow unthinking and unreasoning nature," just as Dr. Cohen would ridicule the engineer who would plan a canal in most tortuous lines, because, forsooth, nature thus finds for her rivers outlets to the ocean. Man's reason should discover better ways.

In conclusion, let me urge the medical profession to accept Hahnemann's challenge, "Machts nach aber machts recht nach." Let the experiments be made in the spirit of true investigation, not in a spirit of wanton opposition and bigotry. Let it be a search for the truth. Let homœopathy—*i. e.*, a practice in accordance with the "law of similars," "the single remedy," and the "smallest dose that will cure," three points upon which Hahnemann based his work—stand or fall by the test. Theorizing teaches nothing: education, trained observation, and experiment alone will suffice.

AUG. KORNDŒRFER.

1728 GREEN ST. Nov 20, 1889.

TOLEDO.

To the Editor of THE MEDICAL NEWS,

SIR: A medical centre may be defined to be concentrated medical influence, the lengths of the radii being but the estimates of the strength and worth of the concentration, by those cognizant of its existence.

These medical centres have points of similarity to other concentrations: the electric light, for instance, increases in apparent power as one approaches it. For this reason, perhaps, the medical influence of Toledo is not greatly felt in Chicago or other distant points.

The charitable-mindedness of our neighbors allows us to indulge in the pleasurable belief that our influence goes out to and beyond the towns around us.

A growing, hustling city of 100,000 inhabitants cannot but present points of interest to medical men. Spread over a large area, and generally upon sandy soil, we have two factors in the maintenance of health not possessed by most cities, and our low mortality, scarcely above the lowest, is one of our prides.

A physician who leaves a country practice of $1500 a year and comes here to locate makes a mistake, unless he has reasons other than a desire for a large practice. The exact number of physicians in Toledo is unknown, but, as elsewhere, the profession is overfull.

Some of our best physicians are connected with one or the other of two medical colleges, in which altogether there are about thirty-five students.

The Toledo Medical Association, with about sixty members, meets twice a month, and the meetings are growing in interest, and the quality of work done is good. One medical journal is published monthly.

The Northwestern Medical Association, born in Toledo, and now nineteen years old, meets here this week.

We have several hospitals, one being partially under the control of homœopaths.

Both lay and professional men have been searching for the cause of the unusually large number of cases of diphtheria that have occurred lately in two wards of the city. Dogs and cats have been accused of carrying the disease from one family to another, and faulty sewers and other forms of nastiness of generating the poison. The mortality of cases reported has been twenty-five per cent.

Eye and ear, and throat and nose are the only specialties that seem to be profitable here, and with these exceptions every physician does a general practice, not because we do not like to send our patients to specialists, but because each one feels the need of the work himself.

Several of our physicians were in Europe this summer, and thus, perhaps a little slowly, but surely, are we becoming cosmopolitan.

NEWS ITEMS.

Tests of Electrical Execution Apparatus.—At the New York State prison a bull was recently made the subject of an experiment with the electrical machine designed for the execution of criminals. The animal was instantly killed with a voltage of 900. The speed of the dynamo could not be steadily maintained much above a voltage of 400, in consequence of incomplete machinery. The instruments for measuring the currents were trustworthy, being those that had been furnished for the occasion by the Johns Hopkins University. The apparatus has a capacity of 1500 volts, which is more than will be needed. Dr. A. D. Rockwell, of New York, was present as one of the State commission of experts, and stated that he was convinced that 1000 volts would invariably kill a human being painlessly, and that as a protracted contact is unnecessary, the disfigurement of the body by burning will be avoided. In regard to the electrical resistance of the human body, as compared with that of the bull, the opinion is that it is much less.

A Psychological Museum.—A curious museum has been established at Florence, Italy, by ministerial decree, to be known as the "Psychological Museum." It might be termed the museum of the human passions, if the officially announced programme is carried out. The eminent ethnologist and sanitarian, Dr. Mantegazza, has been charged with the development of the new undertaking. Lectures on experimental psychology will, it is stated, be delivered under the direction of Dr. Mantegazza.

A Definition of Faith-cure.—The Rev. Dr. Lyman Abbott, of Brooklyn, is credited with giving the following definition of "faith-cure" from his standpoint: "When I get sick, I will show my faith in God by securing the best doctor I can find, getting the best human skill, and following the directions given me by a good physician. Faith does not consist in refusing to take medicine, but it is the using of all the means of cure which is given us to use, and medicines have been shown to be one of those means."

The Health of London in 1889.—The *Lancet* of January 4th contains a summary of the mortality in London during the past year, from which the inference is drawn that the health of that city was by far the best that has been known in modern times, or since registration reports have been kept. The total number of deaths was 75,683, a smaller number than in 1870, when the population was a million less than in 1889. The death-rate was 17.5 per 1000, while in 1888 the rate was 18.5 per 1000, a gain of one in the thousand, despite a growing population. This is so remarkable that the *Lancet* questions its reliability, but concludes to accept it as a mark of the sanitary improvement of that great metropolis. The difficulty in the way of getting a confessedly genuine death-rate is seen in the fact that, as there has been no census in London since 1881, the basis of population for the computation of a death-rate must be the estimate of the registration authorities; and the suspicion constantly arises that the estimate has been placed too high, year by year.

Electric Lights in the New York Hospital.—The lighting of the New York Hospital has been changed from gas to electricity. With this change it is thought that the quality of the respirable air in the institution has improved, and that the temperature of the wards is under better control. The plant includes 700 Edison lamps. The operating room is fitted out with these lamps, so that operations may be performed at any hour of the night or day.

Bequest to the Maine General Hospital.—At the death of Mrs. H. H. Hill, of Augusta, Me., the Maine General Hospital will fall heir to $40,000 bequeathed by the late Dr. H. H. Hill.

Suit against an Ophthalmic Surgeon.—Dr. Hermann Knapp, of New York City, is the defendant in a suit for $5000 damages. A death from pneumonia took place at his ophthalmic hospital after an operation for cataract. The allegation of the representatives of the deceased is that the fatal pneumonia might have been obviated by better attendance and care. The rejoinder is that good treatment and care were employed, and that pneumonia may arise in the best of surroundings and in the least expected manner.

Meeting of the Fifth District Branch of the New York State Medical Association.—The next meeting of the Fifth District Branch of the New York State Medical Association will be the sixth annual meeting, to be held in Brooklyn on Tuesday, May 27, 1890. All Fellows desiring to read papers will please notify the secretary, E. H. Squibb, M.D., P. O. Box 94, Brooklyn, N. Y.

A Monument for Washington's Mother.—Largely through the instrumentality of Marion Harland, who is well known by reason of her essays upon housekeeping and the care of infants, a scheme has been set on foot with the object of collecting a sufficient sum to renovate thoroughly and finish the imperfect and partly ruined monument which was begun in 1843 over the grave of Mary, the mother of Washington.

As is well pointed out, Washington's entire training, both moral and physical, depended upon his mother's wisdom, owing to the early death of his father.

The *Home-Maker*, of New York, will receive subscriptions for any amount toward this purpose, and will give to the fund seventy-five cents out of every $2.00 subscription, provided that the subscription is marked, "For Mary Washington Monument."

Intubation in Italy.—The first intubation of the larynx for croup in Italy was recently performed by Dr. Egidi, of Naples, who still holds that tracheotomy is usually the preferable operation.

Hospital Appointments.—Dr. Byron Whitford has recently been made a visiting physician to the Rhode Island Hospital, *vice* Dr. J. W. C. Ely, resigned. Dr. Joseph H. Akers succeeds Dr. Whitford on the staff of out-patient physicians.

Since September, 1889, the affairs and departments of this hopital have been running smoothly and successfully under the administration of its young, but efficient, superintendent, Dr. John M. Peters, whose term of service as interne in the same institution expired but a few months previous to his appointment as superintendent.

Alcohol in Patent Medicines.—In the report on nostrums, proprietary medicines, and new drugs, which was read before the American Association for the Cure of Inebriates, is found in the appendix the following list of the results of the analyses of a large number of well-known patent medicines, which is of interest not only to the physician, but to the student of human nature, in view of the readiness with which charlatanism can hoodwink persons who in other matters are supposed to have the ordinary quantity of common sense:

	Per cent of Alcohol.
Dr. Buckland's Scotch Oats Essence . . . (Also ¼ gr. morphine to the ounce.) A more insidious and dangerous fraud can scarcely be imagined, especially when administered as this is recommended, for the cure of inebriety or the opium habit.	35.
The "Best" Tonic	7.65
Carter's Physical Extract	22.
Hooker's Wigwam Tonic	20.7
Hoofland's German Tonic	29.3
Hop Tonic	7.
Howe's Arabian Tonic. "Not a rum drink" .	13.2
Jackson's Golden Seal Tonic	19.6
Liebig Co.'s Coca Beef Tonic	23.2
Mensman's Peptonized Beef Tonic	16.5
Parker's Tonic . . . . . "A purely vegetable extract. Stimulus to the body without intoxicating. Inebriates struggling to reform will find its tonic and sustaining influence on the nervous system a great help to their efforts."	41.6
Schenck's Seaweed Tonic . . . . . "Distilled from seaweed after the same manner as Jamaica spirits is from sugar-cane. It is therefore entirely harmless, and free from the injurious properties of corn and rye whiskey."	19.5
Atwood's Quinine Tonic Bitters	29.2
L. F. Atwood's Jaundice Bitters	22.3
Moses Atwood's Jaundice Bitters	17.1
H. Baxter's Mandrake Bitters	16.5
Boker's Stomach Bitters	42.6

	Per cent. of Alcohol.
Brown's Iron Bitters	19.7
"Perfectly harmless. Not a substitute for whiskey."	
Burdock Blood Bitters	25.2
Carter's Scotch Bitters	17.6
Colton's Bitters	27.1
Copp's White Mountain Bitters	6.
"Not an alcoholic beverage."	
Drake's Plantation Bitters	33.2
Flint's Quaker Bitters	21 4
Goodhue's Bitters	16.1
Hartshorn's Bitters	22.2
Hoofland's German Bitters	25.6
"Entirely vegetable and free from alcoholic stimulant."	
Hop Bitters	12.
Hostetter's Stomach Bitters	44.3
Kaufmann's Sulphur Bitters	20.5
"Contains no alcohol." (In fact, it contains no sulphur, but 20.5 per cent. alcohol.)	
Kingsley's Iron Tonic	14.9
Langley's Bitters	18.1
Liverpool's Mexican Tonic Bitters	22.4
Pierce's Indian Restorative Bitters	6.1
Z. Porter's Stomach Bitters	27.9
Rush's Bitters	35.
Dr. Richardson's Concentrated Sherry Wine Bitters	47.5
"Three times daily or when there is sensation of weakness or uneasiness at the stomach."	
Secor's Cinchona Bitters	13.1
Shony's German Bitters	21.5
Job Sweet's Strengthening Bitters	29.
Thurston's Old Continental Bitters	11.4
Walker's Vinegar Bitters	6.1
"Free from all alcoholic stimulants. Contains no spirit."	
Warner's Safe Tonic Bitters	35.7
Warren's Bilious Bitters	21.5
Wheeler's Tonic Sherry Wine Bitters	18.8
Wheat Bitters	13.6
Faith Whitcomb's Nerve Bitters	20.3
Dr. Williams's Vegetable Jaundice Bitters	18.5

Impurities of Creolin.—WEYL, of Berlin, has recently made comparative studies of Pearson's and of Artmann's creolin. Creolin furnished by the latter manufacturer was free from nitro-benzol and carbolic acid, but contained naphthalin. In Pearson's creolin, carbolic acid was always present.—*Deutsche medicinische Wochenschrift*, February 6, 1890.

The Use of Resorcin in Whooping-Cough.—The most recent advocate of the treatment of pertussis by resorcin is DR. JOHN W. FARLOW, of Boston (*Boston Medical and Surgical Journal*, February 27, 1890), who reports two well-marked and severe cases in which a spray of resorcin gave prompt relief. In neither case was the usual treatment of benefit. At about the end of the second week of the disease, Dr. Farlow ordered a nasal and laryngeal spray of a two per cent. resorcin solution every two hours. Relief was almost immediate; sleep, which had hitherto been broken by paroxysms of coughing, became undisturbed, and by the fourth day the cough had disappeared, and the children were perfectly well. The atomizations were continued for a few days as a precaution, but there was no return of the cough. Two other children in the author's practice were also cured in a week by the same treatment.

Obituary.—DR. OTTO BECKER, Privy Councillor and Professor of Ophthalmology in the University of Heidelberg, died in that city on February 7th in his sixty-second year. For some years an assistant of von Arlt, in Vienna, he was called to succeed Knapp in the chair at Heidelberg in 1868, and, taking up the work so well begun there, he carried it splendidly forward. Thanks to him, the Heidelberg Eye Clinic has kept its place as a model institution for the treatment and the study of eye disease; and the report of his twenty years' work there, which he laid before the International Congress in 1888, accords with his numerous other publications in showing that ophthalmology has lost one of its strongest and ablest workers in his death.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM FEBRUARY 25 TO MARCH 3, 1890.

By direction of the Secretary of War, a Board of Medical Officers, to consist of CHARLES SMART, *Major and Surgeon;* VALERY HAVARD, *Captain and Assistant Surgeon;* LOUIS BRECHEMIN, *Captain and Assistant Surgeon*, is appointed to meet at Fort Leavenworth, Kansas, on March 15, 1890, or as soon thereafter as practicable, for the purpose of preparing a manual of drill and instruction for the members of the Hospital Corps, and to examine the equipment of the Corps with a view to its improvement. —Par. 9, *S. O. 47, A. G. O., Washington, D. C.*, February 26, 1890.

LORING, LEONARD V., *Major and Surgeon.*—Having been found incapacitated from active service by an Army Retiring Board, the extension of leave of absence on surgeon's certificate of disability, granted him in S. O. 34, February 10, 1890, from this office, is, by direction of the Secretary of War, still further extended until further orders, on account of disability.—Par. 3, *S. O. 40, A. G. O., Washington*, February 25, 1890.

SMITH, JOSEPH R., *Lieutenant-Colonel and Surgeon.*—Promoted to be Surgeon with rank of Colonel, February 9, 1890.

BACHE, DALLAS, *Major and Surgeon.*—Promoted to be Surgeon with rank of Lieutenant-Colonel, February 9, 1890.

HARVEY, PHILIP F., *Captain and Assistant Surgeon.*—Promoted to be Surgeon with rank of Major, February 9, 1890.

PATZKE, J. H., *Major and Surgeon.*—The leave of absence for seven days, granted in Orders No. 25, Fort Huachuca, Arizona Territory, February 12, 1890, to take effect the 14th instant, is extended twenty-three days.—Par. 1, *S. O. 18, Department of Arizona*, February 17, 1890.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF THE MEDICAL CORPS OF THE U. S. NAVY, FOR THE WEEK ENDING MARCH 1, 1890.

RUSH, C. W., *Passed Assistant Surgeon.*—Ordered to the Navy Yard, New York.

AUZAL, E. W., *Passed Assistant Surgeon.*—Ordered to the U. S. S. "Galena."

THE MEDICAL NEWS *will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.*

Local papers containing reports or news items should be marked.

Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

All communications relating to the editorial department of the NEWS *should be addressed to No. 1004 Walnut Street, Philadelphia.*